



# IB DIPLOMA PROGRAM

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## IB DIPLOMA PROGRAM

The IB Diploma Program is a balance between the desirability of a broad education and the need to allow some specialisation. In all subjects the emphasis is on the development of skills and learning how to learn, in addition to mastery of subject content.

To achieve a broad and balanced program the student must choose 1 subject from each of these 6 groups. The following subjects are offered in both high level (HL) and standard level (SL) unless otherwise stated:

### GROUP 1 LANGUAGE AND LITERATURE

The study of literature in the student's first language or the language of instruction of the school, including the study of world literature. At RMSC students study English A: Literature.

### GROUP 2 LANGUAGE ACQUISITION

Second language other than the student's first language. There are 2 levels: Language B and Language Ab Initio. The prerequisite for Language B is 3 - 4 years of study in Middle School or relevant background in the language. We offer Japanese B, Italian B, German B and Italian Ab Initio.

### GROUP 3 INDIVIDUALS AND SOCIETIES

Psychology; Environmental Systems and Societies (SL only). (This is an interdisciplinary subject and can be taken in either Group 3 or Group 4).

### GROUP 4 SCIENCES

Chemistry; Physics; Environmental Systems and Societies (SL only), Biology. (This is an interdisciplinary subject and can be taken in either Group 3 or Group 4) and Business Management.

### GROUP 5 MATHEMATICS

Mathematics Applications and Interpretations  
Mathematics Analysis and Approaches

### GROUP 6 THE ARTS

Visual Art or students can choose a second subject from group 3 or group 4.

The student must choose 3 subjects for study in greater depth at HIGHER LEVEL (HL) and 3 subjects for study in somewhat lesser depth at STANDARD LEVEL (SL).

### THE CORE

Diploma students must also complete the 3 core elements of the Diploma requirements.

#### THEORY OF KNOWLEDGE (TOK)

Theory of Knowledge (TOK) which explores the nature of knowledge across the disciplines. It encourages students to appreciate other cultural perspectives and understand their own culture. It stimulates critical reflection on knowledge and allows students to examine the grounds for moral, political and aesthetic judgments.

#### EXTENDED ESSAY

An extended essay of 4,000 words (maximum) which offers the opportunity to investigate a topic of special interest and acquaints students with the kind of independent research and writing skills expected at university.

#### CAS

Creativity, Activity, Service (CAS) which involves a range of activities. The 3 strands of CAS, which are often interwoven with particular activities are characterised as follows:

#### CREATIVITY

Arts and other experiences that involve creative thinking

#### ACTIVITY

Physical exertion contributing to a healthy lifestyle, complementing work elsewhere in the Diploma Program

#### SERVICE

An unpaid and voluntary exchange that has a learning benefit for the student.



## IB DIPLOMA PROGRAM (continued)

The IB Diploma Program is a balance between the desirability of a broad education and the need to allow some specialisation. In all subjects the emphasis is on the development of skills and learning how to learn, in addition to mastery of subject content.

GROUP	YEAR 11	YEAR 12
1 Language and Literature	IB English A: Literature	IB English A: Literature
2 Language Acquisition	Italian B German B Ab Initio Italian Japanese B	Italian B German B Ab Initio Italian Japanese B
3 Individuals and Societies	Psychology Environmental Systems and Societies Business Management	Psychology Environmental Systems and Societies Business Management
4 Sciences	Chemistry Physics Environmental Systems and Societies Biology Sports Science	Chemistry Physics Environmental Systems and Societies Biology Sports Science
5 Mathematics	Mathematics Application and Interpretations Mathematics Analysis and Approaches	Mathematics Application and Interpretations Mathematics Analysis and Approaches
6 Arts	Visual Art or students choose a second subject from group 3 or group 4	Visual Art or students choose a second subject from group 3 or group 4
Theory of Knowledge (TOK)	Year 11 TOK	Year 12 TOK
Extended Essay		

## ENROLMENT REQUIREMENTS AND CHOOSING SUBJECTS

Use this document to make your selection and discuss these fully with your parents. Remember that you need to choose 6 subjects, 1 from each group and that 3 must be at Higher Level and 3 at Standard Level. Take into account:

- Your interest and ability in the subject
- Your commitment to your studies and ability to work independently
- Your university and career plans – talk with your Yungkurinthe Marni teachers, subject teachers, IB Coordinator and Student Counsellors.
- All IB subjects at Year 11 are accredited SACE Stage 1 subjects.
- IB students may either continue with IB in Year 12 or transfer into SACE Stage 2 with the written permission of the Head of Senior School. If a student transfers to SACE Stage 2, the SACE Board requires an IB score of at least a 3 in order to receive credit for their Year 11 IB subjects.



## IB DIPLOMA PROGRAM (continued)

### ENGLISH A : LITERATURE (SL/HL)

#### **LEVELS** Year 11 and Year 12

#### **LENGTH** Full year

As part of the Diploma Program (DP), students take at least 1 subject from studies in language and literature.

The courses offer a broad range of texts, and students grow to appreciate a language's complexity, wealth and subtleties in a variety of contexts. Students take their studies in a language in which they are academically competent.

The language A: literature course introduces students to the analysis of literary texts. It is the course through which the IB's policy of mother-tongue entitlement is delivered.

The course is organised into 3 areas of exploration and 7 central concepts, and focuses on the study of literary works. Together, the 3 areas of exploration of the course add up to a comprehensive exploration of literature from a variety of cultures, literary forms and periods. Students learn to appreciate the artistry of literature, and develop the ability to reflect critically on their reading, presenting literary analysis powerfully through both oral and written communication.

#### **KEY FEATURES OF THE CURRICULUM AND ASSESSMENT MODELS**

- Available at higher and standard levels
- Higher level study requires a minimum of 240 class hours, while standard level study requires a minimum of 150 class hours
- Students study 13 works at higher level and 9 works at standard level from a representative selection of literary forms, periods and places
- Students develop the ability to engage in close, detailed analysis of literary works, building understanding of the techniques involved in literary criticism
- The study of literary works in context is emphasised, and through the study of literature in translation the student is challenged to reflect on the role of cultural assumptions in interpretation
- Students are assessed through a combination of formal examination and oral and written coursework.
- The formal examination comprises 2 essay papers, 1 requiring the analysis of a passage of unseen literary text, and the other comparative response to a question based on 2 works studied
- Students also perform an oral activity presenting their analysis of 2 works studied
- HL students comply with an additional written coursework requirement which consists of writing a 1200 - 1500 word essay on 1 of the works studied.

## IB DIPLOMA PROGRAM (continued)

### LANGUAGES AB INITIO - ITALIAN, GERMAN B, ITALIAN B, JAPANESE B (SL)

#### LEVELS Year 11 and Year 12

#### LENGTH Full year

Language acquisition consists of 2 modern language courses — Language Ab Initio and Language B — designed to provide students with the necessary skills and intercultural understanding to enable them to communicate successfully in an environment where the language studied is spoken.

Offered at SL only, Language Ab Initio is a language acquisition course designed for students with no previous experience in - or very little exposure to - the target language. Language Ab Initio students develop their receptive, productive and interactive skills while learning to communicate in the target language in familiar and unfamiliar contexts. Students develop the ability to communicate through the study of language, themes and texts.

There are 5 prescribed themes: identities, experiences, human ingenuity, social organisation and sharing the planet. While the themes are common to both Language Ab Initio and Language B, the Language Ab Initio syllabus additionally prescribes 4 topics for each of the 5 themes, for a total of 20 topics that must be addressed over the 2 years of the course.

The following language acquisition aims are common to both Language Ab Initio and Language B:

- Develop international-mindedness through the study of languages, cultures, and ideas and issues of global significance.
- Enable students to communicate in the language they have studied in a range of contexts and for a variety of purposes.
- Encourage, through the study of texts and through social interaction, an awareness and appreciation of a variety of perspectives of people from diverse cultures.
- Develop students' understanding of the relationship between the languages and cultures with which they are familiar.
- Develop students' awareness of the importance of language in relation to other areas of knowledge.
- Provide students, through language learning and the process of inquiry, with opportunities for intellectual engagement and the development of critical and creative thinking skills.
- Provide students with a basis for further study, work and leisure through the use of an additional language.
- Foster curiosity, creativity and a lifelong enjoyment of language learning.
- Students describe situations, narrate events, make comparisons, explain problems, and state and support their personal opinions on a variety of topics relating to course content
- Students produce a wide variety of oral and written texts for audiences, contexts and purposes associated with academic and personal interests
- At HL, students are required to study 2 literary works originally written in the target language, and are expected to extend the range and complexity of the language they use and understand in order to communicate
- Students are assessed both externally and internally
- External assessment consists of Paper 1: productive skills—writing (a written response to a task) and Paper 2: receptive skills—with separate sections for listening (demonstrating understanding of three audio passages) and reading (demonstrating understanding of three written passages)
- Internal assessment at SL consists of an individual oral assessment—productive and interactive skills (a presentation by the student and a follow-up discussion based on a visual stimulus linked to one of the prescribed themes of the course, and a general conversation with the teacher based on at least one additional theme of the course)
- Internal assessment at HL consists of an individual oral assessment—productive and interactive skills (a presentation by the student and a follow-up discussion based on an extract from one of the literary works studied during the course, and a general conversation with the teacher using one or more of the five prescribed themes of the course as a starting point)

#### KEY FEATURES OF THE CURRICULUM AND ASSESSMENT MODELS

- Available at standard (SL) and higher level (HL)
- The recommended teaching time to complete the course is 150 hours for SL and 240 hours for HL
- Knowledge of vocabulary and grammar (the *what* of language) is reinforced and extended by understanding audience, context, purpose, meaning and variation (the *why* and *how* of language)
- The development of international-mindedness is one of the key aims of the course
- The prescribed themes of the course are inspired by the transdisciplinary themes of the Primary Years Programme (PYP) and the global contexts of the Middle Years Programme (MYP)
- Students are exposed to a variety of authentic text types in relation to the prescribed themes and related course content

## IB DIPLOMA PROGRAM (continued)

### ENVIRONMENTAL SYSTEMS AND SOCIETIES

**LEVELS** Year 11 and Year 12

**LENGTH** Full year

Through studying environmental systems and societies (ES&S) students will be provided with a coherent perspective of the interrelationships between environmental systems and societies; 1 that enables them to adopt an informed personal response to the wide range of pressing environmental issues that they will inevitably come to face.

The teaching approach is such that students are allowed to evaluate the scientific, ethical and socio-political aspects of issues.

ES&S is 1 of 2 interdisciplinary courses offered in the Diploma Program, Literature and Performance is the other interdisciplinary course. Because it is an interdisciplinary course, students can study this course and have it count as either an individuals and societies or a science course, or both. This gives students the opportunity to study (an) additional subject(s) from any group.

Students will be able to study this course successfully with no specific previous knowledge of science or geography. However, as the course aims to foster an international perspective, awareness of local and global environmental concerns and an understanding of the scientific methods, a course that shares these aims would be good preparation.

During the course, students will study 8 different topics. An important aspect of the ES&S course is hands-on work in the laboratory and/or out in the field.

#### KEY FEATURES OF THE CURRICULUM AND ASSESSMENT MODELS

- Available only at standard level (SL)
- The minimum prescribed number of hours is 150
- A hands-on approach to the course delivery is emphasised.
- Students are assessed both externally and internally
- External assessment consists of 2 written papers and provides opportunities for students to demonstrate an understanding through the application, use, synthesis, analysis and evaluation of environmental issues, information, concepts, methods, techniques and explanations.
- Internal assessment task accounts for 25% of the final assessment. This involves the completion of an individual investigation of an ESS research question that has been designed and implemented by the student. The investigation is submitted as a written report.

### SPORTS SCIENCE

**LEVELS** Year 11 and Year 12

**LENGTH** Full year

This course lies within the Sciences. Students explore the concepts, theories, models and techniques that underpin each subject area and through these develop their understanding of the scientific method.

SEHS students participate in a compulsory group 4 project. This collaborative and interdisciplinary exercise provides an opportunity for students to explore scientific solutions to global questions.

#### KEY FEATURES OF THE CURRICULUM AND ASSESSMENT MODEL:

- Available at standard (SL) and higher levels (HL)
- The minimum prescribed number of hours is 150 for SL and 240 for HL
- The SEHS course incorporates the disciplines of anatomy and physiology, biomechanics, psychology and nutrition, which are studied in the context of sport, exercise and health.
- A combination of syllabus content and experimental work provides the opportunity for students to acquire the knowledge and understanding necessary to apply scientific principles and analyse human performance.
- The SEHS course has strong international dimensions such as international sporting competition and the international bodies that regulate them. Ethical issues that exist within sporting competitions are considered.
- The comprehensive curriculum provides excellent preparation for university courses including those specifically related to Sport, Sports Science or Physical Education.

## IB DIPLOMA PROGRAM (continued)

### BUSINESS MANAGEMENT

#### **LEVELS** Year 11 and Year 12

#### **LENGTH** Full year

The business management course is designed to develop students' knowledge and understanding of business management theories, as well as their ability to apply a range of tools and techniques.

Students learn to analyse, discuss and evaluate business activities at local, national and international levels. The course covers a range of organisations from all sectors, as well as the socio-cultural and economic contexts in which those organisations operate.

The course covers the key characteristics of business organisation and environment and the business functions of human resource management, finance and accounts, marketing and operations management. Links between the topics are central to the course. Through the exploration of 6 underpinning concepts (change, culture, ethics, globalisation, innovation and strategy), the course allows students to develop a holistic understanding of today's complex and dynamic business environment. The conceptual learning is firmly anchored in business management theories, tools and techniques and placed in the context of real world examples and case studies.

The course encourages the appreciation of ethical concerns at both a local and global level. It aims to develop relevant and transferable skills, including the ability to: think critically; make ethically sound and well-informed decisions; appreciate the pace, nature and significance of change; think strategically; and undertake long term planning, analysis and evaluation. The course also develops subject-specific skills, such as financial analysis.

The aims of the business management course at HL and SL are to:

1. Encourage a holistic view of the world of business.
2. Empower students to think critically and strategically about individual and organisational behaviour.
3. Promote the importance of exploring business issues from different cultural perspectives.
4. Enable the student to appreciate the nature and significance of change in a local, regional and global context.
5. Promote awareness of the importance of environmental, social and ethical factors in the actions of individuals and organisations.
6. Develop an understanding of the importance of innovation in a business environment.

#### **KEY FEATURES OF THE CURRICULUM AND ASSESSMENT MODEL:**

External assessment for HL and SL students consists of 2 written examination papers. Paper 1 is based on a pre-seen case study issued in advance, and paper 2 consists of structured questions based on stimulus material and an extended response question that assesses students' understanding of the key concepts of the course.

Internal assessment for HL students is a AIF and for SL students a written commentary. In both tasks, students study real world business organizations. These are internally marked by subject teachers and then externally moderated by IB examiners.

## IB DIPLOMA PROGRAM (continued)

### BIOLOGY (SL/HL)

#### LEVELS Year 11 and Year 12

#### LENGTH Full year

As 1 of the 3 natural sciences in the IB Diploma Programme, biology is primarily concerned with the study of life and living systems. Biologists attempt to make sense of the world through a variety of approaches and techniques, controlled experimentation and collaboration between scientists. At a time of global introspection on human activities and their impact on the world around us, developing and communicating a clear understanding of the living world has never been of greater importance than it is today. Through the study of DP biology, students are empowered to make sense of living systems through unifying themes. By providing opportunities for students to explore conceptual frameworks, they are better able to develop understanding and awareness of the living world around them. This is carried further through a study of interactions at different levels of biological organisation, from molecules and cells to ecosystems and the biosphere. Integral to the student experience of the DP biology course is the learning that takes place through scientific inquiry. With an emphasis on experimental work, teachers provide students with opportunities to ask questions, design experiments, collect and analyse data, collaborate with peers, and reflect, evaluate and communicate their findings. DP biology enables students to constructively engage with topical scientific issues. Students examine scientific knowledge claims in a real-world context, fostering interest and curiosity.

By exploring the subject, they develop understandings, skills and techniques which can be applied across their studies and beyond.

Through the overarching theme of the nature of science, the course of Biology aims to enable students to:

1. Develop conceptual understanding that allows connections to be made between different areas of the subject, and to other DP sciences subjects.
2. Acquire and apply a body of knowledge, methods, tools and techniques that characterize science.
3. Develop the ability to analyse, evaluate and synthesize scientific information and claims.
4. Develop the ability to approach unfamiliar situations with creativity and resilience.
5. Design and model solutions to local and global problems in a scientific context
6. Develop an appreciation of the possibilities and limitations of science.

7. Develop technology skills in a scientific context.
8. Develop the ability to communicate and collaborate effectively.
9. Develop awareness of the ethical, environmental, economic, cultural and social impact of science.

#### CURRICULUM MODEL OVERVIEW

The DP biology course promotes concept-based teaching and learning to foster critical thinking. The DP biology course is built on:

- approaches to learning
- nature of science
- skills in the study of physics.

See table below.

SYLLABUS COMPONENT	TEACHING HOURS	
	SL	HL
<b>Syllabus content</b>	<b>110</b>	<b>180</b>
Unity and diversity	19	33
Form and function	26	39
Interaction and interdependence	31	48
Continuity and change	34	60
<b>Experimental programme</b>	<b>40</b>	<b>60</b>
Practical work	20	40
Scientific investigation	10	10



## IB DIPLOMA PROGRAM (continued)

### BIOLOGY (SL/HL) (CONTINUED)

#### ASSESSMENT AT A GLANCE

TYPE OF ASSESSMENT	FORMAT OF ASSESSMENT	TOTAL HOURS		WEIGHTING OF FINAL GRADE (%)
		SL	HL	
<b>External</b>		<b>3</b>	<b>4.5</b>	<b>80</b>
Paper 1	Paper 1A: Multiple-choice questions Paper 1B: Data-based questions (4 questions that are syllabus related, addressing all themes)	1.5	2	36
Paper 2	Data-based and short-answer questions Extended-response questions	1.5	2.5	44
<b>Internal</b>		<b>1</b>		<b>20</b>
Scientific investigation	The scientific investigation is an open-ended task in which the student gathers and analyses data in order to answer their own formulated research question. The outcome of the scientific investigation will be assessed through the form of a written report. The maximum overall word count for the report is 3,000 words.	1		20

## IB DIPLOMA PROGRAM (continued)

### CHEMISTRY (SL/HL)

#### LEVELS Year 11 and Year 12

#### LENGTH Full year

As 1 of the 3 natural sciences in the IB Diploma Programme, chemistry is primarily concerned with identifying patterns that help to explain matter at the microscopic level. This then allows matter's behaviour to be predicted and controlled at a macroscopic level. The subject therefore emphasizes the development of representative models and explanatory theories, both of which rely heavily on creative but rational thinking. DP chemistry enables students to constructively engage with topical scientific issues. Students examine scientific knowledge claims in a real-world context, fostering interest and curiosity. By exploring the subject, they develop understandings, skills and techniques which can be applied across their studies and beyond. Integral to the student experience of the DP chemistry course is the learning that takes place through scientific inquiry both in the classroom and the laboratory.

Through the overarching theme of the nature of science, the course aims to enable students to:

1. Develop conceptual understanding that allows connections to be made between different areas of the subject, and to other DP sciences subjects.
2. Acquire and apply a body of knowledge, methods, tools and techniques that characterize science.
3. Develop the ability to analyse, evaluate and synthesize scientific information and claims.
4. Develop the ability to approach unfamiliar situations with creativity and resilience.
5. Design and model solutions to local and global problems in a scientific context.
6. Develop an appreciation of the possibilities and limitations of science.

7. Develop technology skills in a scientific context.
8. Develop the ability to communicate and collaborate effectively.
9. Develop awareness of the ethical, environmental, economic, cultural and social impact of science.

#### CURRICULUM MODEL OVERVIEW

The DP chemistry course promotes concept-based teaching and learning to foster critical thinking. The DP chemistry course is built on:

- approaches to learning
- nature of science
- skills in the study of physics.

See table below.

SYLLABUS COMPONENT	TEACHING HOURS	
	SL	HL
<b>Syllabus content</b>	<b>110</b>	<b>180</b>
Structure 1. Models of the particulate nature of matter	17	21
Structure 2. Models of bonding and structure	20	30
Structure 3. Classification of matter	16	31
Reactivity 1. What drives chemical reactions?	12	22
Reactivity 2. How much, how fast and how far?	21	31
Reactivity 3. What are the mechanisms of chemical change?	24	45
<b>Experimental programme</b>	<b>40</b>	<b>60</b>
Practical work	20	40
Scientific investigation	10	10

## IB DIPLOMA PROGRAM (continued)

### CHEMISTRY (SL/HL) (CONTINUED)

#### ASSESSMENT AT A GLANCE

TYPE OF ASSESSMENT	FORMAT OF ASSESSMENT	TOTAL HOURS		WEIGHTING OF FINAL GRADE (%)
		SL	HL	
<b>External</b>		<b>3</b>	<b>4.5</b>	<b>80</b>
Paper 1	Paper 1A: Multiple-choice questions Paper 1B: Data-based questions and questions on experimental work	1.5	2	36
Paper 2	Short answer and extended-response questions	1.5	2.5	44
<b>Internal</b>		<b>10</b>		<b>20</b>
Scientific investigation	The scientific investigation is an open-ended task in which the student gathers and analyses data in order to answer their own formulated research question. The outcome of the scientific investigation will be assessed through the form of a written report. The maximum overall word count for the report is 3,000 words.	10		20

## IB DIPLOMA PROGRAM (continued)

### PHYSICS (SL/HL)

#### LEVELS Year 11 and Year 12

#### LENGTH Full year

As 1 of the 3 natural sciences in the IB Diploma Programme, physics is concerned with an attempt to understand the natural world; from determining the nature of the atom to finding patterns in the structure of the universe. It is the search for answers from how the universe exploded into life to the nature of time itself. Observations are essential to the very core of the subject. Models are developed to try to understand observations, and these themselves can become theories that attempt to explain the observations. Besides leading to a better understanding of the natural world, physics gives us the ability to alter our environments. DP physics enables students to constructively engage with topical scientific issues. Students examine scientific knowledge claims in a real-world context, fostering interest and curiosity. By exploring the subject, they develop understandings, skills and techniques which can be applied across their studies and beyond. Integral to the student experience of the DP physics course is the learning that takes place through scientific inquiry both in the classroom and the laboratory.

Through the overarching theme of the nature of science, the course aims to enable students to:

1. Develop conceptual understanding that allows connections to be made between different areas of the subject, and to other DP sciences subjects.
2. Acquire and apply a body of knowledge, methods, tools and techniques that characterize science.
3. Develop the ability to analyse, evaluate and synthesize scientific information and claims.
4. Develop the ability to approach unfamiliar situations with creativity and resilience.
5. Design and model solutions to local and global problems in a scientific context

6. Develop an appreciation of the possibilities and limitations of science.
7. Develop technology skills in a scientific context.

#### CURRICULUM MODEL OVERVIEW

The DP physics course promotes concept-based teaching and learning to foster critical thinking. The DP physics course is built on:

- approaches to learning
- nature of science
- skills in the study of physics.

See table below.

SYLLABUS COMPONENT	TEACHING HOURS	
	SL	HL
<b>Syllabus content</b>	<b>110</b>	<b>180</b>
A. Space, time, and motion	27	42
B. The particulate nature of matter	24	32
C. Wave behaviour	17	29
D. Fields	19	38
E. Nuclear and quantum physics	23	39
<b>Experimental programme</b>	<b>40</b>	<b>60</b>
Practical work	20	40
Scientific investigation	10	10

## IB DIPLOMA PROGRAM (continued)

### PHYSICS (SL/HL) (CONTINUED)

#### ASSESSMENT AT A GLANCE

TYPE OF ASSESSMENT	FORMAT OF ASSESSMENT	TOTAL HOURS		WEIGHTING OF FINAL GRADE (%)
		SL	HL	
<b>External</b>		<b>3</b>	<b>4.5</b>	<b>80</b>
Paper 1	Paper 1A: Multiple-choice questions Paper 1B: Data-based questions	1.5	2	36
Paper 2	Short-answer and extended-response questions	1.5	2.5	44
<b>Internal</b>		<b>10</b>		<b>20</b>
Scientific investigation	The scientific investigation is an open-ended task in which the student gathers and analyses data in order to answer their own formulated research question. The outcome of the scientific investigation will be assessed through the form of a written report. The maximum overall word count for the report is 3,000 words.	10		20

## IB DIPLOMA PROGRAM (continued)

### PSYCHOLOGY (SL/HL)

#### LEVELS Year 11 and Year 12

#### LENGTH Full year

At the core of the DP psychology course is an introduction to three different approaches to understanding behaviour: the biological, cognitive and sociocultural approaches. Students study and critically evaluate the knowledge, concepts, theories and research that have developed the understanding in these fields.

The interaction of these approaches to studying psychology forms the basis of a holistic and integrated approach to understanding mental processes and behaviour as a complex, dynamic phenomenon, allowing students to appreciate the diversity as well as the commonality between their own behaviour and that of others.

The contribution and the interaction of the three approaches is understood through the four options in the course, focusing on areas of applied psychology: abnormal psychology, developmental psychology, health psychology, and the psychology of relationships. The options provide an opportunity to take what is learned from the study of the approaches to psychology and apply it to specific lines of inquiry.

Psychologists employ a range of research methods, both qualitative and quantitative, to test their observations and hypotheses. DP psychology promotes an understanding of the various approaches to research and how they are used to critically reflect on the evidence as well as assist in the design, implementation, analysis and evaluation of the students' own investigations.

Surrounding the approaches and the options are the overarching themes of research and ethics. A consideration of both is paramount to the nature of the subject.

The aims of the psychology course at SL and at HL are to:

- Develop an understanding of the biological, cognitive and socio-cultural factors affecting mental processes and behaviour.
- Apply an understanding of the biological, cognitive and sociocultural factors affecting mental processes and behaviour to at least 1 applied area of study.
- Understand diverse methods of inquiry.
- Understand the importance of ethical practice in psychological research in general and observe ethical practice in their own inquiries.

- Ensure that ethical practices are upheld in all psychological inquiry and discussion.
- Develop an awareness of how psychological research can be applied to address real-world problems and promote positive change.
- Provide students with a basis for further study, work and leisure through the use of an additional language.
- Foster curiosity, creativity and a lifelong enjoyment of language learning.

#### CURRICULUM MODEL OVERVIEW

See table below.

SYLLABUS COMPONENT	TEACHING HOURS	
	SL	HL
<b>Core</b>	90	120
<ul style="list-style-type: none"> <li>• Biological approach to understanding behaviour</li> <li>• Cognitive approach to understanding behaviour</li> <li>• Sociocultural approach to understanding behaviour</li> <li>• Approaches to researching behaviour</li> </ul>	20	60
<b>Options</b>	20	20
<ul style="list-style-type: none"> <li>• Abnormal psychology</li> <li>• Developmental psychology</li> <li>• Health psychology</li> <li>• Psychology of human relationships</li> </ul>		
<b>Internal assessment</b>	20	20
Experimental study		
<b>Total teaching hours</b>	150	240

## IB DIPLOMA PROGRAM (continued)

### PSYCHOLOGY (SL/HL) (CONTINUED)

#### ASSESSMENT AT A GLANCE

TYPE OF ASSESSMENT	FORMAT OF ASSESSMENT	TOTAL HOURS		WEIGHTING OF FINAL GRADE (%)	
		SL	HL	SL	HL
External		3	5	75	80
Paper 1	Three short answer questions on the core. One essay from a choice of 3 on the biological, cognitive and sociocultural approaches. <b>HL only:</b> essays will reference additional HL topic.	2	2	50	40
Paper 2	<b>SL:</b> one question from a choice of 3 on 1 option. <b>HL:</b> two questions; one each from a choice of 3 on 2 options.	1	2	25	20
Paper 3	Three short answer questions on approaches to research.		1		20
Internal		20	20	25	20
Experimental study	A report on an experimental study undertaken by the student.	20	20	25	20

## IB DIPLOMA PROGRAM (continued)

### MATHEMATICS: APPLICATIONS AND INTERPRETATIONS

#### LEVELS Year 11 and Year 12

#### LENGTH Full year

Individual students have different needs, aspirations, interests and abilities. For this reason there are 2 different DP subjects in mathematics:

- Mathematics: analysis and approaches
- Mathematics: applications and interpretation.

Each course is designed to meet the needs of a particular group of students. Both courses are offered at SL and HL.

The IB DP Mathematics: applications and interpretation course recognises the increasing role that mathematics and technology play in a diverse range of fields in a data-rich world. As such, it emphasises the meaning of mathematics in context by focusing on topics that are often used as applications or in mathematical modelling. To give this understanding a firm base, this course includes topics that are traditionally part of a pre-university mathematics course such as calculus and statistics. Students are encouraged to solve real-world problems, construct and communicate this mathematically and interpret the conclusions or generalisations.

Students should expect to develop strong technology skills, and will be intellectually equipped to appreciate the links between the theoretical and the practical concepts in mathematics. All external assessments involve the use of technology. Students are also encouraged to develop the skills needed to continue their mathematical growth in other learning environments.

The internally assessed exploration allows students to develop independence in mathematical learning. Throughout the course students are encouraged to take a considered approach to various

mathematical activities and to explore different mathematical ideas.

The aims of all DP mathematics courses are to enable students to:

1. Develop a curiosity and enjoyment of mathematics, and appreciate its elegance and power.
2. Develop an understanding of the concepts, principles and nature of mathematics.
3. Communicate mathematics clearly, concisely and confidently in a variety of contexts.
4. Develop logical and creative thinking, and patience and persistence in problem solving to instil confidence in using mathematics.
5. Employ and refine their powers of abstraction and generalisation.
6. Take action to apply and transfer skills to alternative situations, to other areas of knowledge and to future developments in their local and global communities.
7. Appreciate how developments in technology and mathematics influence each other.
8. Appreciate the moral, social and ethical questions arising from the work of mathematicians and the applications of mathematics.
9. Appreciate the universality of mathematics and its multicultural, international and historical perspectives.
10. Appreciate the contribution of mathematics to other disciplines, and as a particular “area of knowledge” in the TOK course.
11. Develop the ability to reflect critically upon their own work and the work of others.
12. Independently and collaboratively extend their understanding of mathematics.

#### ASSESSMENT AT A GLANCE

See table below.

TYPE OF ASSESSMENT	FORMAT OF ASSESSMENT	TOTAL HOURS		WEIGHTING OF FINAL GRADE (%)	
		SL	HL	SL	HL
<b>External</b>					
Paper 1	Technology allowed Compulsory short response questions based on the syllabus.	1.5	2	40	30
Paper 2	Technology allowed Compulsory extended response questions based on the syllabus	1.5	2	40	30
Paper 3	Technology allowed Two compulsory extended response problem solving questions		1		20
<b>Internal</b>					
Exploration		15	15	20	20



## IB DIPLOMA PROGRAM (continued)

### MATHEMATICS ANALYSIS AND APPROACHES (SL/HL)

#### LEVELS Year 11 and Year 12

#### LENGTH Full year

The Mathematics: Analysis and Approaches course is designed for students who wish to study mathematics as a subject in its own right or to pursue their interests in areas related to mathematics. It will appeal to students who are interested in exploring real and abstract applications of mathematical concepts. They will enjoy problem solving and generalisation. This course is suitable for students who may go on to further study in subjects that have a significant level of mathematics content, for example mathematics itself, engineering, physical sciences or economics.

#### TOPICS COVERED THROUGH THE COURSE

The 5 topics below are covered during the SL course – each of these topics has sub-topics:

- Number and Algebra
- Functions
- Geometry and Trigonometry
- Probability and Statistics
- Calculus

In addition to this the course contains investigative and inquiry-based learning, supporting the students in their internally assessed exploration task.

There is some content that is common with the Mathematics: Applications and Interpretations course but the Mathematics: Analysis and Approaches has a greater emphasis on calculus, numerical and algebraic approaches.

#### ACTIVITIES AND ASSESSMENT

Teacher and students have regular weekly opportunities to assess progress and attainment. Some activities assess student achievement against formal criteria, such as worksheets, problem sets or quizzes. Learning is also supported with discussion forums, journals, email, and regular live lessons in the online classroom.

#### ADVICE FROM OUR TEACHERS

In order to succeed, it is recommended students set aside 5 to 6 hours a week.

A Graphical Display calculator is required for this course. Pamoja recommends the following 2 calculators:

- Texas Instruments TI-84 Plus CE
- Texas Instruments TI-Nspire (a non CAS version)

#### BENEFITS TO STUDENTS

Taking Mathematics: Analysis and Approaches SL online will enable students to:

- be supported by highly experienced IB teachers
- develop independence in learning and time-management
- develop their ability to work in a connected world
- become experienced in a wide range of online learning tools
- better cope with online learning demands in higher education.

#### ASSESSMENT AT A GLANCE

See table below.

TYPE OF ASSESSMENT	FORMAT OF ASSESSMENT	TOTAL HOURS		WEIGHTING OF FINAL GRADE (%)	
		SL	HL	SL	HL
<b>External</b>					
Paper 1	No Technology allowed <b>Section A:</b> Compulsory short response questions based on the syllabus <b>Section B:</b> Compulsory extended response questions based on the syllabus	1.5	2	40	30
Paper 2	Technology allowed <b>Section A:</b> Compulsory short response questions based on the syllabus <b>Section B:</b> Compulsory extended response questions based on the syllabus	1.5	2	40	30
Paper 3	Technology allowed Two compulsory extended response problem solving questions		1		20
<b>Internal</b>					
Exploration		15	15	20	20

## IB DIPLOMA PROGRAM (continued)

### VISUAL ART OR STUDENTS CHOOSE A SECOND SUBJECT FROM GROUP 3 OR GROUP 4

**LEVELS** Year 11 and Year 12

**LENGTH** Full year

The visual art are an integral part of everyday life, permeating all levels of human creativity, expression, communication and understanding.

They range from traditional forms embedded in local and wider communities, societies and cultures, to the varied and divergent practices associated with new, emerging and contemporary forms of visual language. They may have socio-political impact as well as ritual, spiritual, decorative and functional value; they can be persuasive and subversive in some instances, enlightening and uplifting in others. We celebrate the visual art not only in the way we create images and objects, but also in the way we appreciate, enjoy, respect and respond to the practices of art-making by others from around the world. Theories and practices in visual art are dynamic and ever-changing, and connect many areas of knowledge and human experience through individual and collaborative exploration, creative production and critical interpretation.

The IB Diploma Program visual art course encourages students to challenge their own creative and cultural expectations and boundaries. It is a thought-provoking course in which students develop analytical skills in problem-solving and divergent thinking, while working towards technical proficiency and confidence as art-makers. In addition to exploring and comparing visual art from different perspectives and in different contexts, students are expected to engage in, experiment with and critically reflect upon a wide range of contemporary practices and media. The course is designed for students who want to go on to study visual art in higher education as well as for those who are seeking lifelong enrichment through visual art.

Supporting the International Baccalaureate mission statement and learner profile, the course encourages students to actively explore the visual art within and across a variety of local, regional, national, international and intercultural contexts. Through inquiry, investigation, reflection and creative application, visual art students develop an appreciation for the expressive and aesthetic diversity in the world around them, becoming critically informed makers and consumers of visual culture.

**ASSESSMENT AT A GLANCE**

See table below.

TYPE OF ASSESSMENT	FORMAT OF ASSESSMENT	WEIGHTING OF FINAL GRADE (%)
<b>External</b>		<b>60</b>
Comparative study	<ul style="list-style-type: none"> <li>• 10-15 screens which examine and compare at least 3 artworks, at least 2 of which should be by different artists</li> <li>• A list of sources used</li> </ul>	20
Process portfolio	<ul style="list-style-type: none"> <li>• 9-18 screens which evidence the students sustained experimentation, exploration, manipulation and refinement of a variety of art making activities</li> </ul>	40
<b>Internal</b>		<b>40</b>
Exhibition	<ul style="list-style-type: none"> <li>• A curatorial rationale that does not exceed 400 words</li> <li>• 4-7 artworks</li> <li>• Exhibition text (stating the title, medium, size and intention) for each artwork</li> </ul>	40