



**ST. PAUL'S CO-EDUCATIONAL COLLEGE**

2020-2021

Form Three

An Introduction to the International Baccalaureate  
Diploma Programme

Dear Parents and Students,

SPCC offers the curricula of the local DSE and the IBDP in parallel. This information booklet sets out to provide a general introduction to the International Baccalaureate Diploma Programme (IBDP) and other issues relevant to its implementation at SPCC. Briefing sessions will be hosted at school for you to understand the application process for the F.4 Preparatory Year and its curriculum. We hope that by doing so, we would be able to assist you and your child to make an informed choice in Form 3 on which curriculum to follow in F.4 and thereafter.

Inside this booklet you will find an overview of the IBDP curriculum structure, a brief course description of our Preparatory Year programme and answers to questions frequently asked about the programme.

Yours sincerely,



Mr. Poon Siu Chi  
Principal

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## **Mission statement of St. Paul’s Co-educational College**

1. To uphold the founding Christian spirit of our schools: ‘Faith, Hope and Love’.
2. To nurture academic excellence and lifelong learning.
3. To cultivate exemplary conduct, proper attitudes.
4. To develop an appreciation for the arts and competence in other activities.
5. To develop a global perspective, foster environment stewardship and serve humanity.
6. To advocate strong communication and interpersonal skills to promote harmony, mutual respect, appreciation and peace among humankind.
7. To adopt a shared and inclusive governance model.
8. To provide the best possible facilities and environment conducive to studies.
9. To maintain a professional and caring academic and administrative staff.

## **Mission Statement of the International Baccalaureate Organization (IB)**

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

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

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

## **The IB Learner Profile**

This is the IB mission statement translated into a set of learning outcomes for the 21<sup>st</sup> century.

IB learners strive to be:

- Inquirers
- Knowledgeable
- Thinkers
- Communicators
- Principled
- Open-minded
- Caring
- Risk-takers
- Balanced
- Reflective



## IB learner profile

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

As IB learners we strive to be:

### INQUIRERS

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

### KNOWLEDGEABLE

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

### THINKERS

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

### COMMUNICATORS

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

### PRINCIPLED

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

### OPEN-MINDED

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

### CARING

We show empathy, compassion and respect. We have a commitment to service, and we act to make a positive difference in the lives of others and in the world around us.

### RISK-TAKERS

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

### BALANCED

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

### REFLECTIVE

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

The IB learner profile represents 10 attributes valued by IB World Schools. We believe these attributes, and others like them, can help individuals and groups become responsible members of local, national and global communities.



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## **The Rationale for SPCC to Offer the IBDP**

The parallels between the educational philosophy at SPCC and the IB in developing students into life-long learners and responsible global citizens are what attracted the school to offer dual curricula, the HKDSE and the IBDP. The School Council strongly believes that the provision of two academically challenging programmes enables the school to better cater to its diverse student body, which encompasses a broad array of talents, interests and different learning styles.

## **The IB**

Founded in 1968 in Geneva, Switzerland, the IB is a non-profit education foundation motivated by its mission to create a better world through education. It aims at promoting internationally recognized programmes of study which focus on the development of the whole student. Students are expected to develop the critical thinking skills, independent learning styles and knowledge of academic research that are expected for successful university level study. They are also expected to consider the nature of knowledge, engage in community service and value cultural diversity.

The IB is based in Geneva and administered by the International Baccalaureate Curriculum and Assessment Centre in Cardiff, United Kingdom.

## **The Educational Programmes of the IB**

The IB offers four educational programmes for a worldwide community of schools:

- the Primary Years Programme (PYP) for students aged 3-12
- the Middle Years Programme (MYP) for students aged 11-16
- the Diploma Programme (DP) for students aged 16-19
- the IB Career-related Certificate (CC) for students aged 16-19

Only schools authorized by the IB may offer the IB curriculum. At SPCC, only the Diploma Programme is offered.

## The IB Diploma Programme Model





## **Subject areas of the IBDP**

The subjects available for study are divided into six groups:

Group 1: Studies in Language and Literature (this is the group through which the IB's policy of mother-tongue entitlement is delivered)

Group 2: Language Acquisition (this is the group for students to learn a language as beginners or as students with prior knowledge in a language)

Group 3: Individuals and Societies, including History, Geography and Economics

Group 4: Sciences, including Biology, Chemistry and Physics

Group 5: Mathematics

Group 6: Music

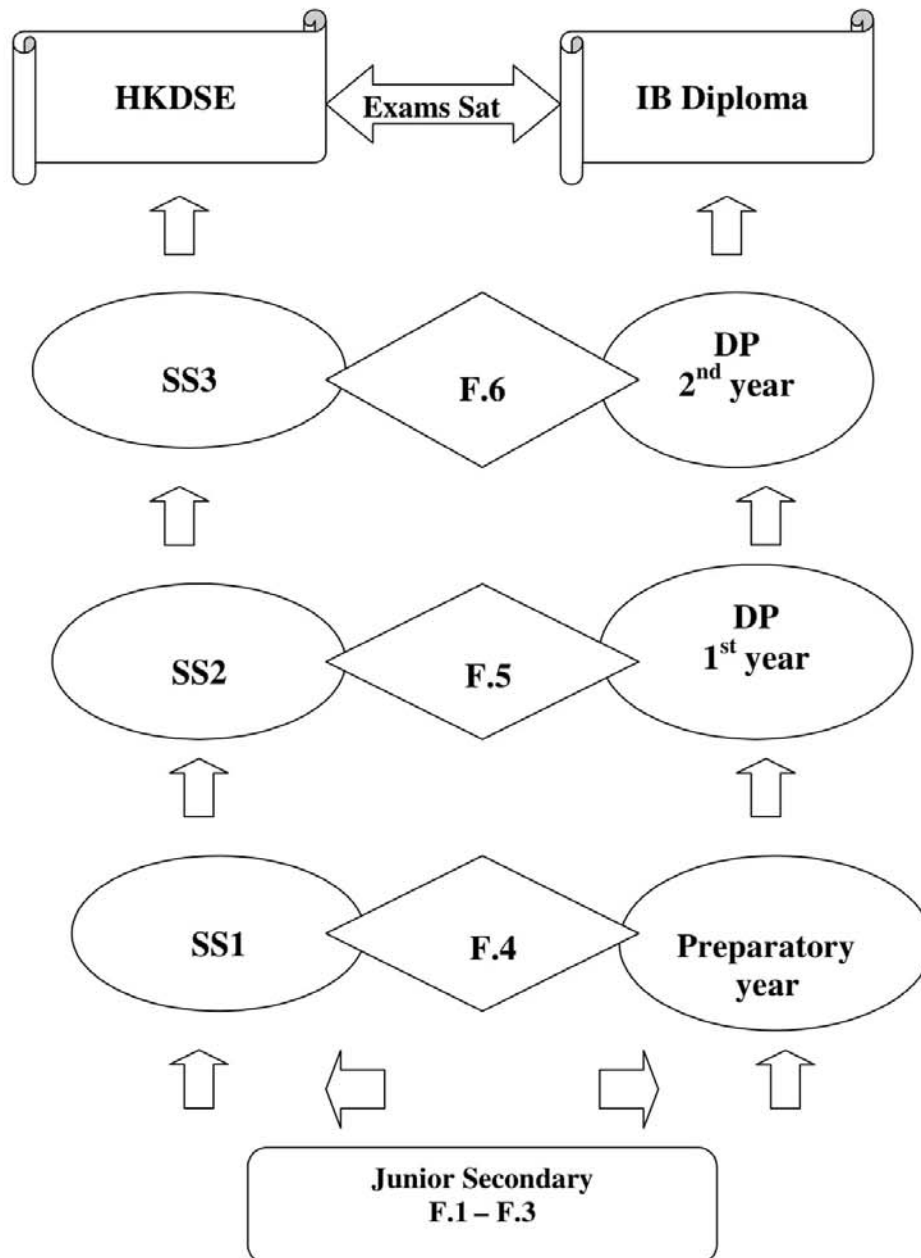
Students must study one subject from each of groups 1 to 5. Their sixth subject may come from Group 6, or from one of the other groups.

IB diploma students normally study three of the above subjects at Higher Level and three at Standard Level.

They are also required to complete three Diploma core elements:

- a course in epistemology called Theory of Knowledge (externally graded)
- a 4000-word academic Extended Essay (externally graded)
- a programme of Creativity, Activity and Service (not examined but tracked internally through a reflective journal)

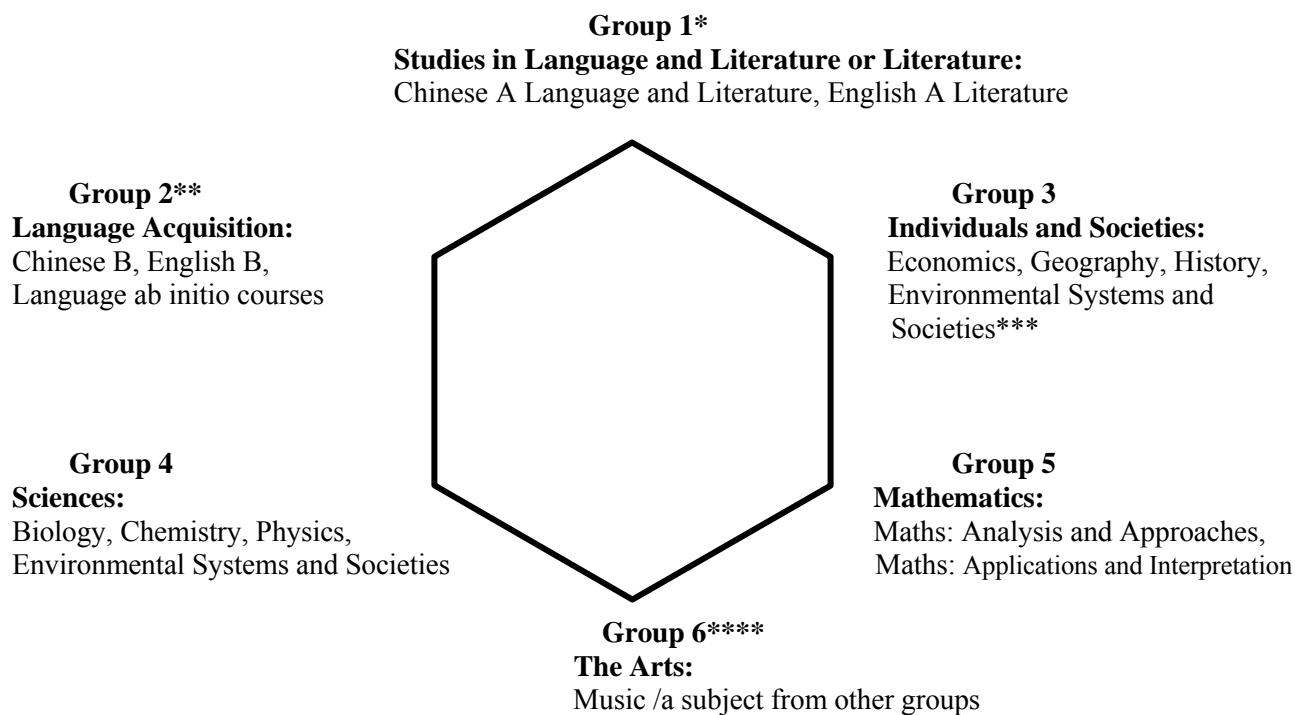
# Dual Curricula at SPC



## An Overview of the IBDP Curriculum Structure at SPCC

The IBDP programme is a two-year linear course followed in Form 5 and Form 6. Students must select one subject from each of the six groups illustrated in the Diploma Programme Model on pg.8. They also have to complete three components which are central to the IBDP – Extended Essay (EE), Theory of Knowledge (TOK) and Creativity, Activity and Service (CAS).

At present, SPCC offers the following subjects:



\*Group 1 – Subjects in this group refer to a student’s native language or otherwise best language. IB students from SPCC Primary School or other local primary schools who have been following a regular Chinese Language programme prior to the IBDP must do Chinese A. If English is studied in this group as well, these students will be following a bilingual diploma and are not required to do Group 2.

\*\*Group 2 – Only local students who have been following an adapted Chinese programme for non-Chinese speaking students (NCS) in primary schools and in junior secondary schools are allowed to do Chinese B in this group.

– Students who do Chinese A in group 1 and English B in Group 2 will also be following a bilingual diploma as they will use English to complete subjects in Group 3 and Group 4.

– Language ab initio courses at SPCC refer to those on-line courses offered by the IB’s Pamoja Education.

\*\*\*Environmental Systems and Societies – an inter-disciplinary subject that meets the requirements of both Group 3 and Group 4 subjects

\*\*\*\* Students may choose a subject from among those offered from Group 1 to Group 4 in lieu of Music. Students who choose to do a third language (ab initio) will be enrolled with the IB’s Pamoja Education which delivers online courses.

While the IBDP allows students to gain a broader view of the world, it also requires them to undertake in-depth study of some academic disciplines. They therefore have to decide which three of their six subjects will be followed at Higher Level (HL) and which three at Standard Level (SL). HL subjects require a greater depth of study across a broader range of content.

Students may opt to study four subjects at HL and two at SL with approval from the Principal.

Environmental Systems and Societies and Language ab initio courses are only offered at SL by the IB.

## **The Three Core Elements**

### **TOK - Theory of Knowledge**

The TOK course is central to the educational philosophy of the International Baccalaureate. It stimulates both teachers and students to reflect critically on the different areas of knowledge and the diverse ways we understand them, taking into consideration the strengths and weaknesses of each of these ways of knowing. In doing so, the various threads in the IBDP curriculum will be linked to allow students to reflect upon the knowledge they gain from science, literature, language, mathematics, and social studies.

The TOK course is composed almost entirely of questions. The most central of these is ‘How do I know that a given assertion is true or a given judgement is well grounded?’ Students as the ‘knowers’ apply this central question to many different, yet interrelated, topics. An awareness of the impact of culture on knowledge plays an essential role in helping students to reflect on these questions. For example, instead of being asked ‘Should creationism be taught in Biology lessons?’, a TOK student may be asked ‘How does your culture / community influence your views on creationism?’ Students are then encouraged to explore their own cultural and personal backgrounds and those of others and to examine the commonalities and differences among various academic disciplines in order to be truly balanced and objective critical thinkers.

### **EE – Extended Essay**

The EE is a 4,000-word research project which provides the opportunity for students to develop individual research skills. Students are required to choose a research topic and complete an in-depth investigation that will take them beyond the confines of the syllabus.

Each student is allocated a teacher as his or her Extended Essay Supervisor according to the choice of research topic. The supervisor provides advice and guidance, for example on how to formulate research question, access appropriate resources, gather and analyze data, and document sources.

### **CAS– Creativity, Activity and Service**

The aim of these three strands of experiential learning in CAS is to enhance the personal and interpersonal development of the students. Such ‘experiential education’ provides an arena for students to develop many of the attributes described in the IB Learner Profile. Participation in CAS fosters in them a value system by which their spirit of open-mindedness, discovery and self-reliance is enhanced. It also helps in their development of new skills and the sharing of special talents.

CAS is an extension to subject work and students are required to engage in activities that display a reasonable balance between creativity, action and service. The focus is on the quality of the activities which are self-initiated by the students. Successful completion of CAS is a requirement for the award of the IB Diploma.

## General Mode of Assessment of the IBDP

- the DP is graded out of 45 points
- assessment includes both the externally assessed final examination and internally assessed coursework (IA)
- IA is assessed by the candidate's own subject teachers; samples are chosen by the IB for re-marking and moderation by its own examiners
- up to 50% internal and up to 80% external assessable components across all academic subjects
- the examination papers take a variety of forms: short answer, structured response or essay type questions; there are also data analysis papers, text commentary papers and case study papers; multiple-choice questions are used in paper 1 in the Sciences
- the EE and TOK essays are produced under coursework conditions and are externally assessed
- externally assessed work is e-marked by examiners around the world
- criterion-referenced assessment with performance measured against well-defined levels of achievement applied equally to all schools
- grade award meetings are held at Cardiff by the senior examiners for each subject to determine final grade boundaries
- results are published on 5th July for May exam sessions (northern hemisphere schools).

## The General Grade Descriptors

The subjects in the six groups, be they followed at SL or HL, are to be evaluated on a point scale of 1 (the lowest) to 7 (the highest).

Grade	Criteria
7 Excellent	A consistent and thorough understanding of the required knowledge and skills, and the ability to apply them almost faultlessly in a wide variety of situations. Consistent evidence of analysis, synthesis and evaluation where appropriate. The student consistently demonstrates originality and insight and always produces work of high quality.
6 Very Good	A consistent and thorough understanding of the required knowledge and skills, and the ability to apply them in a wide variety of situations. Consistent evidence of analysis, synthesis and evaluation where appropriate. The student generally demonstrates originality and insight.
5 Good	A consistent and thorough understanding of the required knowledge and skills, and the ability to apply them in a variety of situations. The student generally shows evidence of analysis, synthesis and evaluation where appropriate, and occasionally demonstrates originality and insight.
4 Satisfactory	A good general understanding of the required knowledge and skills, and the ability to apply them effectively in normal situations. There is occasional evidence of the skills of analysis, synthesis and evaluation where appropriate.

3 Marginal	Limited achievement against most of the objectives, or clear difficulties in some of the areas. The student demonstrates a limited understanding of the required knowledge and skills and is only able to apply them fully in normal situations with support.
2 Poor	Very limited achievement against all the objectives. The student demonstrates a limited understanding of the required knowledge and skills and is unable to apply them fully in normal situations, even with support.
1 Very Poor	Minimal achievement in terms of the objectives. Work that has been completed is well below that required for satisfactory performance. Work may be superficial or irrelevant to the assignments. Assignments may not have been handed in.

## Award of the Diploma

Performance in each subject as shown in the table above is graded on a scale of 1 to 7 points. A maximum of 3 points is awarded for the combined performance in the TOK and the EE. The maximum total point score is 45.

Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Additional Points	Total
Studies in Lang& Lit	Language Acquisition	Individuals and Societies	Sciences	Mathematics	The Arts	TOK & EE	
7	7	7	7	7	7	3	45

The IB Diploma will be awarded to a candidate provided all the following requirements have been met.

- a. CAS requirements have been met.
- b. The candidate's total points are 24 or more.
- c. There is no "N" awarded for theory of knowledge, the extended essay or for a contributing subject.
- d. There is no grade E awarded for theory of knowledge and/or the extended essay.
- e. There is no grade 1 awarded in a subject/level.
- f. There are no more than two grade 2s awarded (HL or SL).
- g. There are no more than three grade 3s or below awarded (HL or SL).
- h. The candidate has gained 12 points or more on HL subjects (for candidates who register for four HL subjects, the three highest grades count).
- i. The candidate has gained 9 points or more on SL subjects (candidates who register for two SL subjects must gain at least 5 points at SL).
- j. The candidate has not received a penalty for academic misconduct from the Final Award Committee.

**The Additional Points of TOK and EE**

The following is the matrix for the award of additional points based on the combined performance in the extended essays and theory of knowledge requirements.

<b>TOK</b> \ <b>EE</b>	A	B	C	D	E or N
A	3	3	2	2	Failing Condition
B	3	2	2	1	
C	2	2	1	0	
D	2	1	0	0	
E or N	Failing Condition				

## General Information of F.4 Prep Year

The F.4 Preparatory Year at SPCC aims at offering a school based curriculum that will equip students with the skills necessary for the IBDP while allowing them to develop their strengths and interests. It also aims at making clear the demands which a diploma student will face.

During this preparatory year students will follow a well-balanced and comprehensive programme which is designed to enhance their knowledge base and various skills: critical thinking, research, time management, oral and written communication, experimentation and independent learning. It is also designed to lay the foundation for the future discussion of the Theory of Knowledge in each subject.

In addition to *Independent Learning and Thinking*, all preparatory year students will have to do six subjects within the year. They will also need to work on a compulsory experiential learning component that aims to prepare them for the expectations and requirements of the Creativity, Activity and Service (CAS) component in the IBDP. This compulsory experiential learning component will require students to display a commitment to community service, to personal physical development and to the enhancement of aesthetic and creative thinking skills.

The **six** subjects for the preparatory year are: English

Chinese

Mathematics

one from column 1

one from column 2

one from column 3

<u>Column 1</u>	<u>Column 2</u>	<u>Column 3</u>
Economics	Biology	Music
or	or	or
Geography	Chemistry	1 more subject from <b>1</b>
or	or	or
History	Physics	1 more subject from <b>2</b>
or	or	
ES*	ES	

Please note:

1. Any subjects which students are planning to take in F.5 and F.6 should be included in their F.4 programme.
2. Students who do both English and Chinese in Group 1 are not required to choose any language from Group 2. Should they want to do a third language, it can be studied as their Group 6 elective.



## **Subjects Offered in F.4 Preparatory Year**

### **English**

#### **Course Description**

The English course focuses on encouraging the enjoyment and understanding of literary works. Students will learn to analyze literature by employing critical techniques and will learn to develop and reflect on their personal responses to works of literature through class discussions, oral presentations, and written commentaries.

#### **Syllabus Outline**

The teaching of oral and written approaches to literary analysis will be integrated throughout the course. Students will study literary texts of different genres, periods and cultures. These will include, but are not limited to:

- Novel: *The Reader* by Bernhard Schlink
- Plays: *Antigone* by Sophocles and *Romeo and Juliet* by William Shakespeare
- Short Stories and Poems by various authors and poets such as Carol Ann Duffy, Maya Angelou, and Margaret Atwood.

Students will also be taught the skills of unseen literary analysis in preparation for the IBDP.

#### **Course Presentation**

Students will be taught in a variety of modes including close analysis of texts, student presentations, online collaborative work, group projects, film discussions, and more. They will be encouraged to participate actively in lessons, both in small and large groups. There will be opportunities for them to express themselves in formal, informal and creative contexts through oral assessments, in-class discussions, and dramatic interpretations of texts.

#### **Assessment**

Assessment will be both formative (during the course) and summative (at the end of the term or course, e.g. as an exam). Individual and group presentations will be assessed in Term One, as will unseen guided analysis on a literary extract. A comparative essay on two drama texts will be assessed in Term 2, as will an individual oral discussion on an extract from one of the plays. Formative assessment will also take the form of ongoing homework assignments and classwork activities.

#### **Prerequisites**

Students should have reached a level of English which enables them to read works of literature relatively confidently and to cope with the demands of English as a first rather than a second language. At the end of the Prep Year, students will be advised by their teachers on the appropriate English course they should pursue for their IBDP - English A Literature or English B.

# 中國語文

## 課程描述 (Course Description)

本科總體教學目標為「博古通今，曉諭中西」，預備班授課內容主要由文學及語言元素組成，希望學生能利用流暢通達之語文，分析文學作品、點評社會議題。

文學作品賞析方面，學生須博覽古今中外名家名篇，以提高鑑賞文本之能力；語言課題方面，學生須閱讀報章及網絡文章，注意社會時事熱話，以建立關注世界之觸覺。學生能將課堂所學內化為一己之語文能力，在文字寫作及口語表述上均能游刃有餘。

## 課程大綱 (Syllabus Outline)

本科教學分文學及語言部分，旨在更妥善地銜接中五及中六課程，幫助學生提早適應國際文憑的學習模式，並提升其閱讀能力、寫作能力、溝通能力及聆聽能力。

文學部分，學生將涉獵不同文體的文本，包括若干篇古典、現代或當代文學作品。通過分析作品的內容、文體特色及寫作手法等，學生賞析能力將有所提升。上學期文學課程以詩歌及中短篇小說為主，下學期則側重於長篇翻譯小說及劇本。

語言部分，學生將接觸常見的六種非文學文類，包括各類新聞寫作及博客文章。通過了解相關文類的文體特徵及閱讀時事新聞，學生不但可初步掌握文本的寫作要求，更可以多關顧社會，明白語言的奧妙之處。

教學材料:

- 《詩經》選讀
- 唐詩選讀
- 新詩選讀
- 現、當代短篇小說選讀
- 現、當代優秀散文選讀
- 優秀翻譯作品選讀

## 教學模式 (Course Presentation)

本科教學模式多樣而豐富，並需學生掌握「自主學習」的能力。課堂活動除一般老師講評外，亦多利用電子教學資源，或要求學生預習某些課題，或於課堂內以小組討論的形式，鼓勵學生自行建構知識。

本科將以普通話作為主要教學語言，但為方便討論，令學生更容易表達己見，凡於口頭報告或小組討論時，學生皆可選擇以粵語進行相關活動。

## 評估方法 (Assessment)

本科評核方式參照國際文憑大學預科課程中國語文及文學科，分為持續性評估及總結性評估

兩部分。持續性評估將包括日常的寫作訓練、小組報告等，旨在鞏固學生平日所學。總結性評估則以文本分析與論文寫作為主要考核內容。

### **修讀條件 (Prerequisites)**

學生須具備流利之粵語及普通話溝通能力，並能以流暢文字進行寫作。

# **Mathematics**

## **Course Description**

The Mathematics course in the Form 4 Preparatory Year serves as a bridge between the junior form Mathematics and IBDP Mathematics. Besides learning new mathematical knowledge, students will use mathematics software and a graphic display calculator (GDC) to explore mathematics and solve problems. The idea of internationalism and approaches to learning will be embedded in the course where appropriate.

## **Syllabus Outline**

Students will be exposed to topics such as numbers, sets, algebra, geometry, trigonometry, statistics and probability to pave their way for the learning of IBDP Mathematics. Presumed knowledge of IBDP courses will be taught where appropriate.

The following skills will be incorporated into the course throughout the year:

- (a) use of a GDC, spreadsheets and dynamic geometry software
- (b) comprehension of extended pieces of mathematical work
- (c) simple mathematical investigation and modelling
- (d) approaches to learning e.g. thinking skills, research skills, communication skills, social skills, self-management skills

## **Course Presentation**

Lessons will be supplemented by various learning activities including reading mathematics works, using spreadsheets, dynamic geometry software and a GDC, making conjectures, doing mini-tasks such as investigation, modelling and enrichment materials. Students are expected to take an active role in learning and exploring mathematics. Students will be encouraged to read different mathematics works and learn the skills required for the learning of IBDP Mathematics. Students will also learn to confidently express themselves through using mathematical terminology. Opportunities will also be provided for students to collaborate in group presentations and group work.

To let students have a better understanding of the two new IBDP mathematics courses, a briefing session will be arranged in F.4 Prep Year. Examples and relevant problems will be introduced during lessons or in assessments.

## **Assessment**

Assessment of learning will consist of unit tests, timetabled examinations and mini-explorations in the form of mathematical investigations, modelling and applications of mathematics. Students are to solve problems with and without the use of a GDC. Relevant grade descriptors will be used in marking the exploration work.

Assessment for learning will consist of assignments, quizzes, observations and performance in class e.g. group discussions, presentations, individual work.

Assessment as learning will consist of self-assessment and peer assessment.

### **Prerequisites**

Students should have attained a Form 3 standard in Mathematics in order to handle the mathematics content/skills during the preparatory year. Students are expected to engage in exploration and investigation of mathematics. They should take the initiative to browse online mathematics websites and read mathematics reference books and works. Besides subject knowledge and calculation skills, they should be willing to use technology such as spreadsheets, dynamic geometry software and a GDC to assist in learning and exploring mathematics and solving mathematics problems.

# Biology

## Course Description

The course serves to prepare the students for IBDP Biology and to develop and sustain their interest in the subject. Through the themes of “Ecosystem & ecology”, “Biodiversity”, “Scientific investigation skills” and “Basic human physiology”, students will acquire basic biological knowledge and generic skills for scientific investigation. Students will also have their study skills and learning styles aligned with those specified in the IB Learner Profile.

## Syllabus Outline

### 1. Ecosystem & ecology

- Level of organization: species, population, community, ecosystem, biome & biosphere
- Components of an ecosystem
- Abiotic factors
- Biotic factors
  - Food chain & food web
  - Trophic level
  - Ecological pyramids
  - energy flow and nutrient cycles

### 2. Biodiversity

- Need of classification
- 3-domain-and 6-kingdom approach of classification
- Binomial nomenclature & hierarchy of taxa
- Diversity of organisms
- prokaryotic & eukaryotic cells
- Kingdom Eubacteria
- Kingdom Archaeobacteria
- Kingdom Protista
- Kingdom Fungi
- Kingdom Plantae
- Kingdom Animalia
- Viruses
- Construction and use of dichotomous key

### 3. Scientific investigation skills

- Basic principles of scientific methods;
- Design of investigation: aim, hypothesis; dependent, independent and controlled variables;
- Data analysis and interpretation
  - qualitative and quantitative data;
  - accuracy and precision;
  - uncertainty;
  - manipulating raw data;
  - descriptive statistics (e.g. mean and standard deviation);
  - error bars and variability of the data set;
  -

- presenting data in tables and graphs
- correlation and regression
- Practical skills

#### **4. Basic human physiology**

- Basic digestion
- Basic gas exchange
- Basic circulation

### **Course Presentation**

A student-centered approach will be adopted throughout the course. An enquiry-based approach, practical sessions and field studies will be employed to fulfill the course aims and objectives. Different teaching pedagogies, for example experiential learning, collaborative learning and mastery learning, and various e-learning tools will be used to attain the learning objectives.

### **Assessment**

Formative assessment throughout the year will be based on assignments, classroom presentations and participation, practical performance, reports on laboratory practical and field studies, and mini project reports. Summative assessments including tests and examinations will also be included. Whenever appropriate, relevant grade descriptors will be used in marking.

### **Prerequisites**

A genuine interest in Biology and a good understanding of basic biological principles learnt in F.3.

# **Chemistry**

## **Course Description**

The course will provide a platform for building essential scientific knowledge and skills. Being an experimental science, Chemistry helps students to develop skills for making scientific enquiries and conducting experiments safely. The course will also provide opportunities for students to discuss science-related issues using the language of Chemistry and apply their acquired knowledge and skills to real life situations.

## **Syllabus Outline**

The syllabus will cover the following topics:

1. Bonding and structures
2. Acids and bases
3. Quantitative Chemistry
4. Energetics
5. Error analysis
6. Oxidation and reduction
7. Fundamentals of organic chemistry

## **Course Presentation**

There will be a variety of approaches to the teaching of Chemistry. By its very nature, Chemistry lends itself to an experimental approach and this will be reflected throughout the course. In addition, students will be engaged in discussions, presentations and note-making to facilitate learning.

## **Assessment**

Student learning will be formatively assessed with course work, tests, term examinations and performance in practical work. Relevant grade descriptors will be used in marking.

## **Prerequisites**

Students should demonstrate a genuine love and passion of learning Chemistry and have a solid foundation on bonding, mole concepts and metal reactivity.



# Physics

## Course Description

The course will serve as a continuation of the science curriculum at junior secondary level and equip students with the necessary knowledge and skills for the IBDP Physics curriculum. Based on students' prior knowledge and their everyday experience, elementary Physics topics will be introduced to provide a coherent and comprehensive view of the world of Physics with the following instructional goals:

1. Knowledge of Physics – basic knowledge with understanding of the discipline of Physics, including phenomena, concepts, principles and theories.
2. Experimental skills – the ability to use basic equipment safely and efficiently, make sensible estimates, take accurate measurements and make scientifically supported arguments.
3. Problem solving – the application of knowledge and principles of Physics to solve problems by the use of qualitative and quantitative reasoning and by experimental investigation.
4. Connections – the understanding of connections of Physics to other disciplines and to societal issues.

## Syllabus Outline

The syllabus will cover the following topics:

- 1 Lenses
2. Force and Motion
3. Nature and Properties of Waves
4. Electricity and Magnetism
5. Atomic Physics

## Course Presentation

A variety of activities which involve different pedagogies will be deployed so that different learning targets can be attained effectively. These include questioning, demonstration, practical work, using IT and multimedia packages, whole-class and group discussion, reading and problem-solving. Students will be encouraged to take an active and independent role in learning.

## Assessment

Student learning will be formatively assessed with assignments, lab reports, tests and scheduled examinations throughout the year. Relevant grade descriptors will be used in marking.

## Prerequisites

A genuine interest in Physics and competence in elementary mathematical skills such as using

expressions in decimal and scientific notation, using calculators to evaluate roots, powers, sine, cosine and tangent functions and their inverses and solving simple algebraic equations.

## **Economics**

### **Course Description**

The Economics course in the Form 4 Preparatory Year aims to prepare students for the study of IBDP Economics. The course will introduce economic concepts and theories that serve as important knowledge foundation. Students will gain an understanding of the dynamic nature of the subject with the use of current economic issues and topical phenomena.

### **Syllabus Outline**

The syllabus will explore the following topics:

1. Basic Economic Concepts
2. Firms and Production
3. Market and Price
4. Market Structure and Price Discrimination
5. Measurement of Economic Performance

### **Course Presentation**

A variety of teaching strategies will be used in delivering the course. Class discussions, case studies and presentations using current real-world issues will be included to develop students' critical thinking skills and essay-writing skills. Students will be encouraged to become inquirers and passionate learners by conducting independent research.

Teachers will encourage applied learning by using relevant local and international news so as to develop in students an awareness of local issues, an international perspective and a sense of community-mindedness in Economics.

### **Assessment**

Student learning will be formatively assessed in class participation, oral presentations, independent research projects, essays and tests. In Term Two, students will also produce a news commentary which is marked with reference to the Internal Assessment criteria in the IBDP.

Written examinations will account for 100% of the final grade where relevant grade descriptors are used in marking.

### **Prerequisites**

Students with solid mathematical background will have an advantage in handling the quantitative analysis as required in the IBDP Economics curriculum.

# **Geography**

## **Course Description**

The Pre-IB Geography course serves as a bridge between the junior form Geography curriculum and the IBDP Geography curriculum. Students are introduced to a variety of geographical concepts and knowledge. Topics are presented through case studies of different scales with equal emphasis on physical and human landscapes.

## **Syllabus Outline**

The syllabus includes the following topics.

1. Population
2. Plate Tectonics
3. Spectacular Landforms in Hong Kong
4. Transport Geography
5. Weather and Climate
6. International Interdependence and Cooperation

The following geographical skills are also incorporated throughout the syllabus.

1. Map Work – interpretation of a selection of maps
2. Statistical Techniques – analyses and presentation of spatial data
3. Fieldwork – collection of primary data for testing geographical hypotheses

## **Course Presentation**

The teaching integrates a variety of methods that engage students in learning processes. Students are encouraged to participate in discussion and presentation actively in lessons. Fieldwork is included to allow students to apply their knowledge to study the environment practically. A variety of teaching aids such as maps, ground and aerial photographs, images, videos, Geographic Information Systems (GIS) will be used to deliver content. Students are encouraged to conduct library research and engage in group projects to enrich their geographical knowledge.

## **Assessment**

Student learning will be formatively assessed in formal written essays, fieldwork reports, group projects, participation in class and timed examinations throughout the year. Relevant grade descriptors are used in marking.

**Prerequisites**

Students should have attained basic levels of map reading skills and English to enable them to read maps and make text references.

# History

## Course Description

The Preparatory Year History course is designed to prepare students to study IB DP History successfully. It will introduce the concepts and skills that are necessary for analysing history and making sound judgements. It will help students develop an understanding of and empathy for people living in other periods and contexts.

## Syllabus Outline

The course will cover the essential developments in the 19<sup>th</sup>-century world in a global context through the investigation of various historical sources and historians' interpretations. Knowledge of the 19<sup>th</sup>-century world will serve as a solid foundation for students to study IB DP History, which looks at the 20<sup>th</sup>-century world.

The syllabus will be divided into 3 sections, and will explore the following topics:

### 1. Introduction to Modern European History

- An overview of major events that shaped the modern western world from the 15<sup>th</sup> to 18<sup>th</sup> centuries
- Change and continuity in 19<sup>th</sup>-century Europe: forces of change and continuity, new European diplomacy
- Development and influence of liberalism and nationalism in 19<sup>th</sup>-century Europe – revolutions, independence and unification movements
- Europe by the end of the 19<sup>th</sup> century

### 2. Introduction to Modern Asian History

- Imperial rule and traditional China
- Challenges to Qing China in the 19<sup>th</sup> century – internal rebellion and external threat (Taiping Rebellion, First and Second Anglo-Chinese Wars)
- Traditions and changes of Tokugawa Japan in the 19<sup>th</sup> century
- Challenges to the Tokugawa Shogunate in the 19<sup>th</sup> century

### 3. Historical Investigation

*Note: The three sections will run in parallel. The time allocation will roughly be 3:3:1 for Sections 1, 2 and 3.*

## **Course Presentation**

A variety of teaching and learning activities will be arranged to engage students actively in the learning process. Students will be encouraged to use a range of primary and secondary sources, communicate historical knowledge, and make judgements. Teachers will also use a variety of teaching aids to maximise students' exposure to different historical sources. Students will be asked to conduct individual research as well as group investigation of historical issues.

## **Assessment**

Student learning will be formatively assessed through written essays, analysis of historical sources, presentations, class discussions and tests. Students will also be required to conduct a historical investigation, which is a trimmed version of the one they have to do for IBDP History. It will be marked using the Internal Assessment level descriptors.

Summative assessment will take the format of essay writing in the end-of-term examinations. Relevant grade descriptors will be used in marking.

## **Prerequisites**

Students should have acquired basic historical concepts and skills in analysing different sources and in communicating historical knowledge and judgements.

## **Environmental Studies**

### **Course Description**

Environmental systems and societies (ESS) offered in the IBDP is a transdisciplinary course. It can be counted as a group 3 or group 4 subject. Environmental Studies in our Preparatory Year will equip students with the knowledge, methodologies and skills required for the IBDP ESS course. Students will examine the environment and environmental issues from the socio-economic, political as well as scientific perspectives. A practical component is incorporated into the topics covered.

### **Syllabus Outline**

The syllabus is mainly developed around two themes – “Understanding our Environment” and “People in the Environment” with the following topics:

#### 1. Understanding our Environment

Atmosphere & Hydrosphere:

- Atmosphere as a system
- Elements of weather and climate and water cycle
- Major climatic zones

Lithosphere:

- Internal structure of the Earth
- Ideas of plate tectonics
- Formation of rocks and soil

Biosphere:

- Structure & functions of ecosystem
- Features of common habitats
- Basic skills for ecological study

#### 2. People in the Environment

- Farming as a system
- Human response to climatic hazards - hurricanes

### **Course Presentation**

Teaching methodologies will integrate a variety of strategies that aim to engage students in the learning process. Practical work including fieldwork and laboratory sessions will be included throughout the syllabus.



**Assessment**

Student learning will be continuously assessed in written assignments, laboratory sessions, fieldwork reports, group projects, participation in class and timetabled examinations throughout the year. Relevant grade descriptors will be used in marking.

**Prerequisites**

There is no prerequisite for this course.

# Music

## Introduction and Changes to DP Music

There have been significant changes made to the DP Music in recent years, which has taken the subject into new and very exciting directions. Most notably, there will *no longer* be any examination in the course. This brings music in line with other group 6 subjects that have not had examinations for a number of years. Instead, DP music students embody three roles: the **researcher**, the **creator** and the **performer**. In these roles, students inquire, create, perform, and reflect on the course's three musical processes: **exploring** in music, **experimenting** with music, and **presenting** in music. In each case, portfolios are prepared with these processes in mind and evidence of the three roles are expected. Through this integrated approach, the course will equip students with strongly developed creative skills, holistic mindsets, and project-based skills, all of which are highly sought after by **universities and employers**.

## Course Description for the Pre-IB Music Course

The music course aims to guide students to discover and expand their musical identity in a continuous, integrated and dynamic process to:

1. Explore a range of musical contexts and make links to, and between, different musical practices, conventions and forms of expression (inquiry)
2. Acquire, develop and experience with musical competencies through a range of musical practices, conventions and forms of expression, both individually and in collaboration with others (action)
3. Evaluate and develop critical perspectives on their own music and the work of others (reflection)

## Syllabus Outline of the pre-IB Music Program

Students and teachers have the agency to personalize unique approaches to musical forms, genres and pieces. A framework of Arts of Inquiry and Contexts has been devised to ensure that musical engagement during the course has sufficient diversity and breadth.

The exploration of diverse musical material is focused through the lenses of four **Areas of Inquiry**:

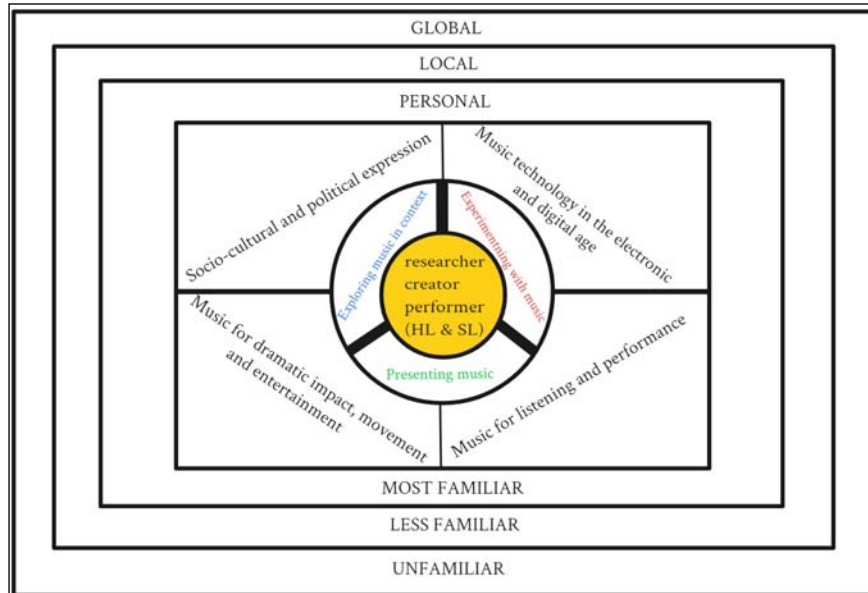
1. Music for sociocultural and political expression
2. Music for listening and performance
3. Music for dramatic impact, movement and entertainment
4. Music technology in the electronic and digital age

Engagement with these **Areas of Inquiry** takes place across three contexts:

1. **Personal** context – music that has significance to the student.

2. **Local** context – music that has local significance. This can be music from the student’s local, regional or cultural community
3. **Global** context – music that is unfamiliar to the student stemming from a variety of places, societies and cultures.

The interaction between *Areas of Inquiry* and the three *Contexts* can be summarised as following:



### Assessment

Students select samples of their work for portfolio submission. These submissions contain:

#### Exploring Music in Context

- a. Written work demonstrating engagement with at least two **Areas of Inquiry**
- b. Exploring as a creator and a performer

#### Experimenting with Music

- a. A written report that provides a **rationale** and **commentary** for the experimentation through at least two **Areas of Inquiry** in a local and/or global context
- b. Experimenting as a creator and a performer

#### Presenting Music

- a. Program notes demonstrating engagement with diverse musical material from four **Areas of Inquiry**
- b. Presenting as a creator and a performer

### Prerequisites

All are welcome to the Pre-IB music course, but students with experience in performance are particularly encouraged to join.

## **Independent Learning and Thinking (ILT)**

### **Course Description**

Serving as a foundation to Theory of Knowledge, this course aims to expand students' critical and reflective thinking skills to facilitate independent inquiry and reflection. Students will also practise academic writing and hone their research skills.

### **Syllabus Outline**

This course will be allotted two lessons in a ten-day cycle. Approximately two-thirds of the instructional time will be used to enhance students' thinking skills through exploration of topics such as current affairs, social issues and other relevant matters. The course will also guide students in learning how to develop research questions and further develop their understanding of academic honesty practices such as knowing how and when to cite sources for different purposes.

### **Course Presentation**

In essence, the course aims to develop a skill set which will enable students to work independently. The concepts mentioned above will be explored through teacher-facilitated discussion, student-led discussion and independent work. Learning will also be consolidated through an online platform that will be used as a means of developing and applying these skills. Students will also be given the chance to engage in personal reflection and to express their thoughts on a regular basis.

### **Assessment**

The course is non-examinable. Ongoing formative evaluation of students' performance and understanding will be done through presentations, online discussions, and in-class group interaction. A summative assessment task will be assigned at the end of each term.

### **Prerequisites**

Students should be able to communicate and express their ideas comfortably in both spoken and written English.

## **Experiential Learning**

### **Content Description**

Preparatory Year Experiential Learning (PYEL) aims to prepare students for the challenges and expectations of the IBDP Creativity, Activity and Service (CAS) core component. To achieve this, PYEL focuses on students achieving the following learning outcomes by the end of the year:

- Initiating their own experiences.
- Engaging in experiences where teamwork and cooperation are necessary.
- Engaging with and developing a greater understanding of sections of the community outside SPCC, especially those with different or greater needs than themselves.
- Developing an increased awareness of their strengths and areas for development.
- Taking part in new and challenging experiences.

In order to achieve this, students are expected to manage a PYEL portfolio, demonstrating a balanced engagement in the three strands (Creativity, Activity and Service), with at least three short term experiences and one long term commitment.

Students will have to participate in the Student Activities Week in November, allowing them to plan and initiate their experience in pairs or groups of not more than 4 students. The experience should engage students in a minimum of 35 hours of direct experience during the week. It has to be organised or run by an established organisation in Hong Kong and the plan has to be formally approved by the Experiential Learning Coordinator.

### **Content Presentation**

Students will receive a briefing at the start of the year that will detail the expectations of the programme.

### **Assessment**

Students are required to demonstrate their achievement of the learning outcomes through written plans, reflections and delivery of a sharing session. In the report card for 1<sup>st</sup> term, students will be graded either pass or fail. In 2<sup>nd</sup> term, students will need to initiate meetings with the Experiential Learning Coordinator, get feedback for the progress and prepare the CAS plan for the following 2 years.

### **Prerequisites**

None, except those required for access to the IBDP.

## **General Assessment Policy of the F.4 Preparatory Year**

The assessment system adopted in the Preparatory Year is in line with that of the IBDP and its stated aims of:

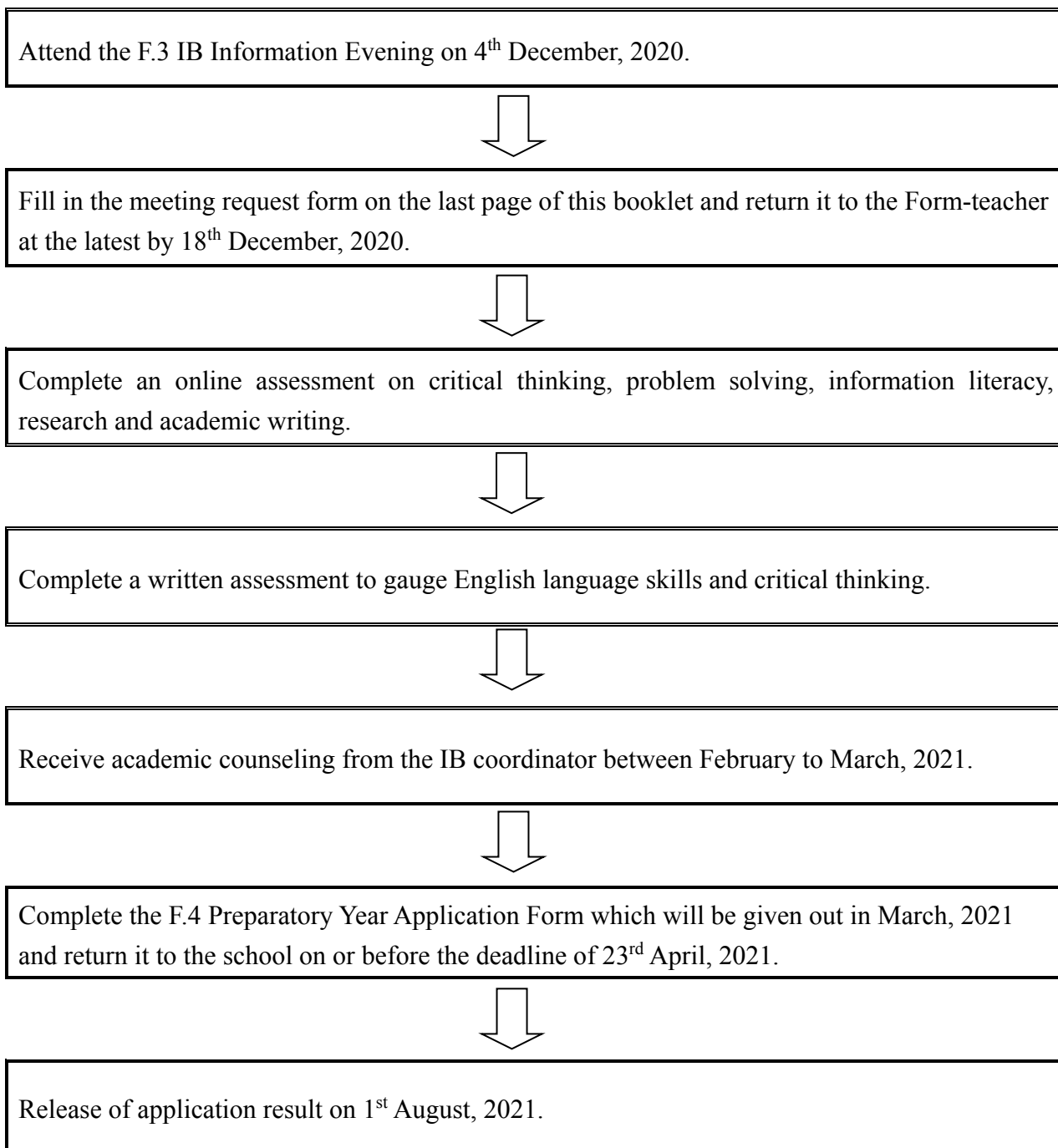
1. encouraging good classroom practice and appropriate student learning;
2. arriving at subject grades that have a high level of reliability;
3. reflecting international-mindedness;
4. balancing development of the higher-order cognitive skills and the more fundamental cognitive skills;
5. ensuring that for each subject a suitable range of tasks are used to assess all objectives.

The grading system is criterion referenced. Each student's attainment of knowledge and skills will be measured against well defined levels of achievement. Hence, student performance is at all times evaluated against expected standards.

This evaluation, be it in the form of homework assignments, tests, oral presentations or exams, is then converted into a grade from 1-7 using either the percentage conversion tables of marks schemes or grade descriptors. In addition, all students are assessed on their academic honesty. Ethical conduct is expected at all times. All these policies are designed to help students and teachers identify weaknesses and strengths and to improve learning and performance for a successful completion of the Preparatory Year.

## Admission Procedures for the F.4 Preparatory Year

Interested internal applicants are required to:



Please note that all applications will be considered by the school with regard to the applicant's general suitability to follow the IBDP programme, their work habits and their aptitude. Their rank order in the internal examinations may also be considered.

## **Frequently Asked Questions**

### **1. How is the IBDP different from the DSE? Is one better than the other?**

While neither programme is better than the other, they each have different emphases. The DSE is a three-year programme aiming to provide students with successful transitions to post-secondary education, university level education as well as the workplace while the IBDP is a two-year programme which prepares students primarily for university level education.

The DSE permits students to choose 3 or 4 electives freely on top of the core subjects of English, Chinese, Mathematics and Liberal Studies. The IBDP on the other hand, requires students to take one course from each of the six IB subject groups plus the three core elements of TOK, CAS and EE. By requiring students to study both the humanities and the sciences, the IBDP by design requires them to have an all-round intellectual development.

For students who intend to do the IBDP, their F.4 year will be a preparatory year. This is not an IBO mandated programme but is one which is designed by SPCC to help acclimatize students to the IB educational philosophy which demands a high degree of independent work and good planning. It also aims at developing their study skills and knowledge in curricular content so that they are well prepared for the two-year programme that follows.

### **2. As a student, how should I decide whether to take the IBDP or the DSE?**

This is a complex issue and one that should be discussed with your parents, teachers and Counsellor of Further Studies. You need to make an informed choice and to have a genuine understanding of yourself, both strengths and constraints. Reflect on your learning experiences in school and seriously consider your learning style, interest, aptitude and personality.

Some students would do better to choose the DSE curriculum if they are strongly inclined to do either the humanities or the sciences. For the IBDP, besides having to do both the humanities and sciences groups, there is the extra components of the TOK and the Extended Essay which involve an extra time and energy commitment in extensive reading and writing. Therefore it is important for you to be an independent and self-motivated learner. Proficiency in English and Chinese is also essential.

### **3. As a parent, how can I help my child prepare for the IBDP?**

Students who plan to take the IBDP should begin their preparation early. Encourage your child to develop and practise good study habits and to understand the importance of time management skills which are required when studying this rigorous curriculum. Also encourage your child to research in greater detail the assessment components and the nature of each of the IB subjects that he/she intends to study. This will help students to develop a better picture of the performance expectations of the programme and why good time management skills are important.



#### **4. When and how to choose between Higher Level and Standard Level?**

Students do not have to choose until the end of the F.4 Preparatory Year. Such choices should be made based on individual strengths and interests. Very often the HL subjects are those that students may want to pursue at tertiary level.

#### **5. What is the class size for every subject?**

A maximum of 25 students.

#### **6. How many marks do students need to obtain to get into a highly competitive university?**

It varies from university to university. Each university sets its own policy. You are advised to check with the Counsellor of Further Studies and visit university website to check entrance requirements. A section of the IB website is dedicated to providing recognition policies and contact information for many universities worldwide. Go to [www.ibo.org](http://www.ibo.org) → University admission → Recognition resources → Resource library → country guides for international students.

#### **7. What is the nature of interaction between the IB students and the rest of the school?**

Students in the IB programme will interact with the larger framework of the school like any student at SPCC. There will be equal opportunities for every student to participate in the school's activities.

#### **8. Can one decide to do the IBDP when one is in F.4?**

No. There will be a deadline at the end of F.3 for students to express their desire to enrol in the Preparatory Year. After this deadline, it is no longer possible to change to IB Candidate status. Once again, the emphasis is on making a carefully planned decision before entry into F.4. By doing your research and planning now, you will be able to choose a program that meets your needs.

#### **9. Where can I get more information?**

You are most welcome to contact Mr. Christopher Koay, the Vice-principal and IB Co-ordinator, or Ms. Belinda Ng, Assistant IB Co-ordinator. You may also find it useful to explore the IB website to learn more about this international community. Visit [www.ibo.org](http://www.ibo.org). There are also IB related reading matters in the school library for you to get acquainted with this curriculum.

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## Meeting with the IB Coordinator

Should you wish to follow the IBDP curriculum, please fill in the following and return this page to your form-teacher by **18<sup>th</sup> December 2020** so that a meeting with Mr. Christopher Koay, the IB Coordinator, and Ms. Belinda Ng, the Assistant IB Coordinator, can be arranged.

Name of Student: \_\_\_\_\_ Form 3 \_\_\_\_\_ (     )

Signature of Student: \_\_\_\_\_

Name of Parent: \_\_\_\_\_

Signature of Parent: \_\_\_\_\_

Date: \_\_\_\_\_