



ST. PAUL'S CO-EDUCATIONAL COLLEGE

2017-2018

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, by doing so, 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, brief course description of our prep year programme and answers to questions frequently asked about the prep year programme.

Yours sincerely,

Mr. Poon Siu Chi
Principal

Contents

Mission Statement of St. Paul's Co-educational College	5
Mission Statement of the International Baccalaureate (IB)	5
The IB Learner Profile	5-6
The Rationale for SPCC to offer the IBDP	7
The IB	7
The Educational Programmes of the IB	7
The IB Diploma Programme Model	8
Subject Areas of the IBDP	9
The Dual Curricula Structure at SPCC	10
An Overview of the IBDP Curriculum Structure at SPCC	11-12
General Mode of Assessment of the IBDP	13
The General Grade Descriptors	13
Award of the Diploma	14-15
General Information of the F.4 Preparatory Year	16
Subjects Offered in the F.4 Preparatory Year	
English	17
中國語文	18-19
中國語文特別課程 (非華語學生適用)	20-21
Mathematics	22-23
Biology	24-25
Chemistry	26
Physics	27-28
Economics	29-30
Geography	31-32
History	33-34

Environmental Studies	35-36
Music	37-38
Independent Learning and Thinking (ILT)	39
Experiential Learning	40
General Assessment Policy of the F.4 Preparatory Year	41
Admission Procedures for the F.4 Preparatory Year	42
Meeting with the IB Coordinator	43
Frequently Asked Questions	45-46

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 21st century.

The 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.



International Baccalaureate®
 Organization Internationale
 du Baccalauréat International

© International Baccalaureate Organization 2013

International Baccalaureate® | Organización Internacional del Baccalauréat® | Organisation Internationale®

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: the arts, including Visual Arts, Music and Theatre

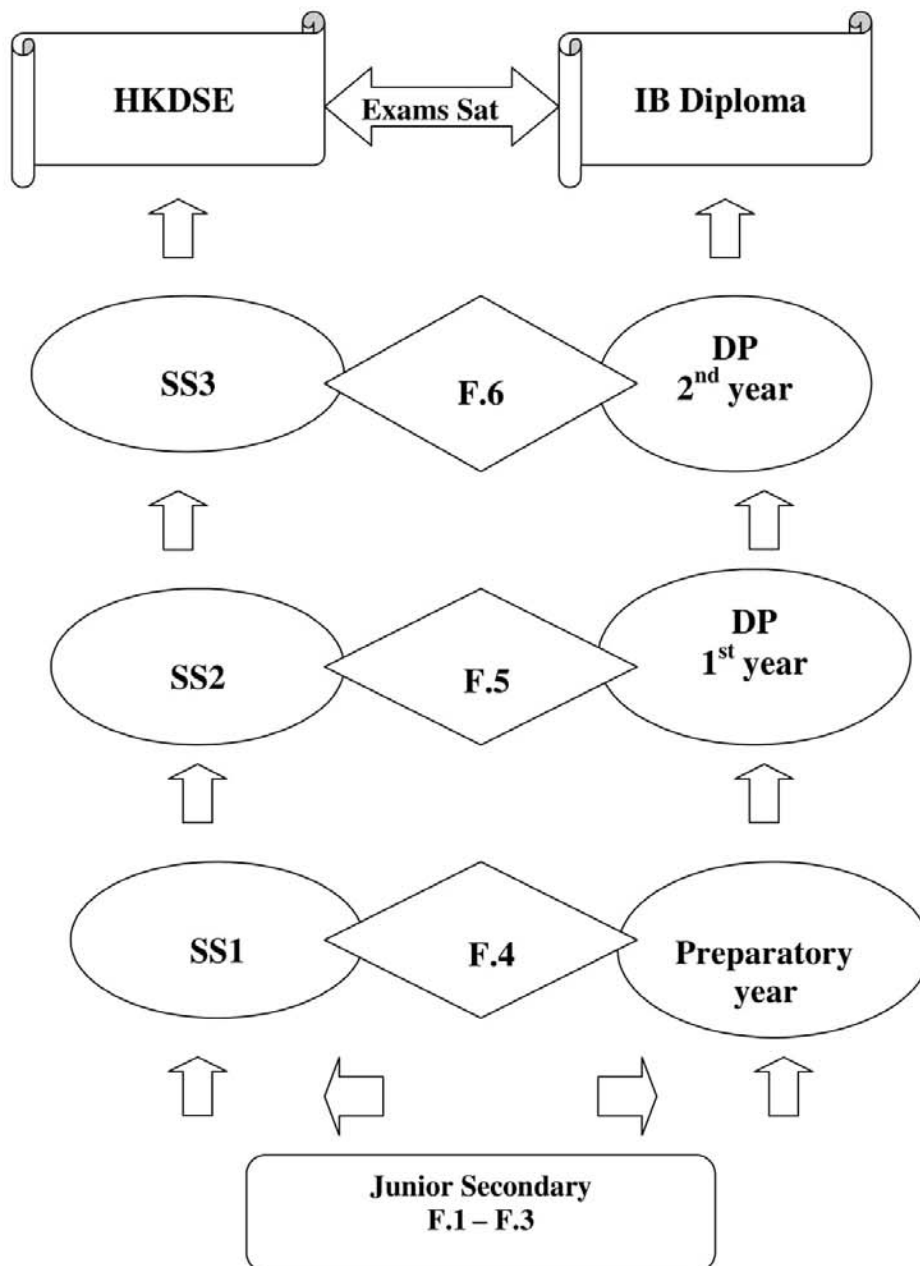
Students must study one subject from each of groups 1 to 5. Their sixth subject may come from Group 6, or from one of the other groups.

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 (graded)
- a 4000-word academic Extended Essay (graded)
- a programme of Creativity, Activity and Service (not examined but tracked internally through a reflective journal)

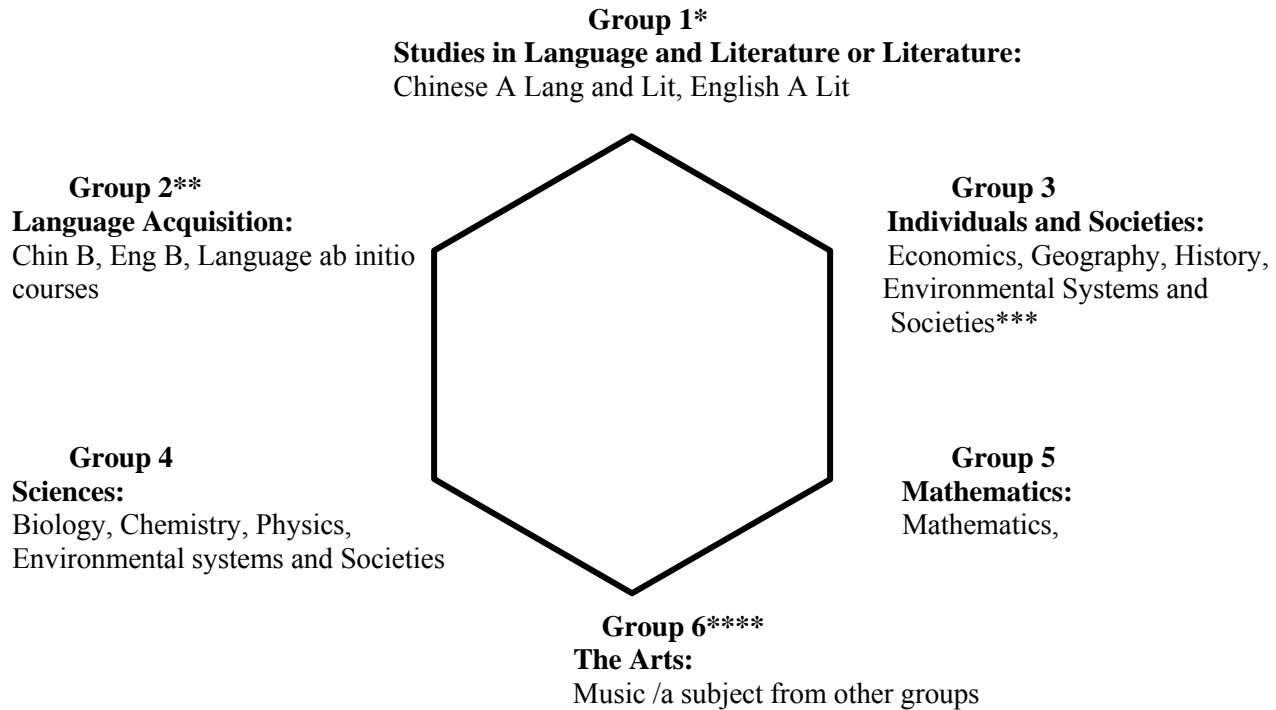
Dual Curricula at SPCC



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 on-line courses.

While the IBDP allows students to gain a broader view of the world, it also requires them to conduct 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.

Environmental Systems and Societies, Mathematical Studies 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 arrive at 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 over 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) and 5th January for November exam sessions (southern 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 Studies in Lang& Lit	Group 2 Language Acquisition	Group 3 Individuals and Societies	Group Sciences	Group 5 Mathematics	Group 6 The Arts	Additional Points TOK & EE	Total
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.

TOK/EE	A	B	C	D	E
A	3	3	2	2	Failing Condition
B	3	2	2	1	
C	2	2	1	0	
D	2	1	0	0	
E	Failing Condition				

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.

Apart from *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 1
or	or	or
History	Physics	1 more subject from 2
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 a range of activities, including project-based, experiential learning opportunities.

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. They will also be taught the skills of unseen commentary in preparation for the IBDP.

Course Presentation

A variety of teaching and learning methods, as well as the recognition of writing as a process, will be adopted. Students will be encouraged to participate actively in lessons, both in small and large groups and to express themselves in formal, informal and creative contexts, including project-based work.

Assessment

Assessment will be both formative (during the course) and summative (at the end of the term or course, e.g. as an exam). Oral presentations will be summatively assessed in Term One, as will unseen commentary on a prose extract or poem. A comparative essay on two drama texts will be assessed in Term 2, as will an oral commentary on an extract from one of the plays, as well as a further unseen commentary. Formative assessment will take the form of ongoing HW assignments and classwork activities.

Prerequisites

Students should have reached a level of English which enables them to read works of literature relatively easily 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、語文及文化元素組成，希望學生能利用流暢通達之語文，分析文學作品、點評文化議題。

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；文化議題討論方面，學生須注意社會國際時事熱話，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，在文字創作及口語表述上均能游刃有餘。

課程大綱 (Syllabus Outline)

本科將以主題單元為主要教學內容，從而培養學生閱讀能力、寫作能力、溝通能力及聆聽能力，以銜接初中語文科課程，並為國際文憑大學預科課程打好基礎。

本科擬於全年教授五大單元，從「個人的自我認知」出發，進而與學生探討「個人與家庭」、「個人與學校」、「個人與國家」、「個人與世界」等關係；小至青少年面對的問題，大至諸如環保、戰爭等國際議題，均被納入教學內容中。通過共同研讀文學作品以及討論新聞時事，學生得以建立正確的人生觀。

每單元均會教授若干篇古典、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。此外，每單元的教學內容也將包括時事及文化議題，藉比較中西方觀點，開拓學生視野，培養其批判性思維能力，從而了解並包容文化差異。

寫作方面，每單元均有相關的寫作訓練。除教授各類實用文體外，本科亦鼓勵學生發揮創意，多運用不同的寫作模式，創作具自我風格的作品。

本科將規定學生須根據時事熱話作個人口頭報告，也將就單元重點進行小組討論，鼓勵同儕互評，以提高學生聆聽及口語表達能力。

教學材料:

- 先秦散文
- 古代名家散文
- 《詩經》選讀
- 唐詩選讀
- 宋詞選讀
- 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，亦要求學生自行預習，於課堂內分享閱讀文學作品心得，兼有個人口頭報告，以分析文學作品。每單元之文化議題部分，須由學生準備材料，在課堂上進行討論，深入探討社會現象。

學生須定時完成不同寫作練習，以期在課程中全面掌握閱讀、口語表達及文字表達能力。

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。學生須在學期內完成若干寫作作業，另外，課堂報告及討論亦計算於分數內。考試分兩卷，包括文學作品賞析及文化議題評論。

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。

中國語文特別課程（非華語學生適用）

課程描述（Course Description）

本課程旨在開拓學生的世界觸覺，並透過文本掌握中文聽說讀寫及分析能力，以及各種不同文體的寫作格式及要求。課程重視學生對中國文化、西方文化及世界大勢的觸覺，期望培養既關懷自身文化又具國際視野的青年。

課程大綱（Syllabus Outline）

課程由三大核心主題——「通訊和媒體」、「社會關係」、「全球問題」，以及五大選修主題——「文化差異」、「休閒活動」、「現代科技問題」、「傳統習俗」、「健康問題」構成，核心主題為必修，選修主題則從中選擇其二，並以此帶領學生探討。課程以主題單元為主要教學內容，著學生認識不同的文體，培養學生閱讀能力、寫作能力、溝通能力及思考能力，並為國際文憑大學預科課程在語言（包括詞彙、風格等）及文化學習兩方面打好基礎。另外，將因應學生程度引導其閱讀文學作品，以作延伸深化之用。

每單元均會基於主題教授若干篇現代或當代作家作品，通過分析作品的語言運用、表達技巧及思想內容，使學生對所學語言和文化有多元思考和理解。

寫作方面，主要訓練學生在處理實際問題上的能力，每單元均有相關寫作訓練。通過教授各類應用文，使學生掌握基本的文體格式，能流暢自然地運用所學語言。

本科將規定學生須根據所學單元的主題作個人口頭報告，也將就單元重點進行小組討論或模擬人物專訪，鼓勵同儕互評，以提高學生聆聽及口語表達能力。

教學材料：

- 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，亦要求學生在課外關心時事，積極參與課堂討論，就青年問題、社會問題和全球問題等話題發表見解。

學生須定時完成閱讀及寫作練習，以期在課程中全面掌握閱讀、口語表達及文字表達能力。

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或普通話進行相關活動。

評估方法 (Assessment)

本科評核方式參照國際文憑大學預科課程中文 B 學科。學生須在學期內完成若干寫作作業，另外，課堂報告及討論亦計算於分數內。考試分兩卷，包括閱讀及一篇從眾多主題裡所選擇的寫作測驗。

修讀條件 (Prerequisites)

課程修讀對象為只研讀過中文約四至五年的學生。學生須具備一定的粵語或普通話溝通能力，並能以中文進行寫作。

Mathematics

Course Description

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

Syllabus Outline

Students will be exposed to topics like numbers, discrete mathematics, 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) doing simple mathematical investigation and modelling

Course Presentation

Lessons will be supplemented by various learning activities like reading mathematics works, using spreadsheets, dynamic geometry software and a GDC, making conjectures, doing investigation and modelling. 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. Besides, students will learn to express themselves by using mathematics terminology coherently with confidence.

Assessment

Formative assessment will consist of assignments, quizzes, reflective journal and class performance.

Summative assessment will consist of unit tests, mini-explorations in the form of mathematical investigations, modelling, applications of mathematics and timetabled examinations. Some questions have to be solved without a calculator. Relevant grade descriptors will be used in marking the exploration work.

Prerequisites

Students should have attained the standard of Form 3 Mathematics in order to deal with the mathematics during the preparatory year. Students are expected to enjoy exploration and investigation

of mathematics. They should have the initiative to read mathematics reference books and works. In addition, they need to have a good command of English to read and write. They should also be comfortable in using mathematics vocabulary to communicate. Besides subject knowledge and calculation skills, they should be willing to use technology like 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 the IB DP Biology and to develop and sustain their interest in the subject. Through learning the themes of “Methods of Statistical Analysis”, “Journey of water in the living world”, and “The classification system” the students will acquire generic skills for scientific investigation. The students will also have their studying skills and learning styles aligned with those specified in the IB Learner Profile.

Syllabus Outline

- 1 Journey of water in the living world
 - 1.1 Properties and Importance of water
 - 1.2 How water enters and leaves cell
Use of water in plants
 - 1.3 Water as a medium for mass flow transport in flowering plants:
Transport of water in xylem
 - 1.3.1 Transport of organic substances in phloem.
 - 1.3.2 Water loss to atmosphere through evapotranspiration
 - 1.4 Water cycle, water in ecosystem and world water problems

- 2 DNA Profiling and Phylogeny
 - 2.1 Chemical properties of DNA & Elucidation of DNA structure
 - 2.2 Central Dogma: DNA to RNA to Protein to physical characters
 - 2.2.1 DNA code
 - 2.2.2 Transcription
 - 2.2.3 Translation
 - 2.2.4 Similarities in DNA sequences
 - 2.3 Principle of DNA profiling
 - 2.4 Application of DNA profiling to phylogeny of organisms

- 3 Classification of living organisms
Biodiversity and Field study
 - 3.1 Classification criteria and the three-domain approach of classification
 - 3.2 Binomial nomenclature and the hierarchy of taxa
 - 3.3 Diversity of viruses, prokaryotes, plants and animals
 - 3.4 Field study – Species diversity
Theory and practical skills
 - 3.5 Field study – Group project

Course Presentation

Student centered approach will be adopted throughout the course. Learning by enquiry, practical sessions and field studies will be employed to fulfill the aims and objectives. Different teaching pedagogies, for example the 5Es (engage, explore, explain, elaborate and evaluate), collaborative learning, mastery learning, will be used to attain the learning objectives.

Assessment

Formative assessment throughout the year will be based on assignments, classroom participation, practical performance, reports on laboratory practical and field studies, report of mini projects, tests and examinations. 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. Acids and bases
 - Properties of acids and bases
 - pH scale
 - Strong and weak acids and bases
2. Quantitative Chemistry
 - Mole concept and Avogadro's constant
 - Calculations based on chemical equations
3. Oxidation and reduction
 - Definitions of oxidation and reduction
 - Redox equations
 - Voltaic cells

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 it is expected that this will be reflected throughout the course.

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 Chemistry Microscopic World – bonding, structures and properties of substances.

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 Force and Motion
- 2 Optics
- 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 F.4 Preparatory Year will build upon the economic concepts introduced to students in F.3. Students will be taught concepts that serve as important foundation knowledge in the study of the IBDP Economics.

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

In addition, emphasis is put on the teaching of essay-writing skills. Students are given opportunities to develop their skills in analysing current issues and topical phenomena using basic economic framework.

Course Presentation

A variety of teaching strategies will be used in delivering the course. Class discussions, case studies and presentations will be included to develop students' critical thinking skills. E-learning platforms will be used in content delivery and formative assessment. Students will be encouraged to become independent and passionate learners by conducting independent research.

Teachers will encourage applied learning by using relevant local and international news, as well as case studies, so as to develop in students an awareness of local issues and an understanding of internationalism 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

Besides, the following geographical skills are 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. Teachers use a variety of teaching aids such as maps, ground and aerial photographs, images, videos, Geographic Information Systems (GIS) to deliver the topics. Students are encouraged to conduct library research or group project 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 reached basic levels of map reading skills and English which enable them to read maps and text references.

History

Course Description

The Preparatory Year History course is designed to prepare students to study the IBDP History successfully. It will introduce the concepts and skills that will be 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 students will be taught the essential developments in the 19th century world in a global context through the investigation of various primary historical sources and secondary historians' work. Knowledge of the 19th century world will serve as a solid foundation for the students to study the IBDP History, which looks at 20th-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 15th to 18th centuries
- Change and continuity in 19th-century Europe: forces of change and continuity, new European diplomacy
- Development and influence of liberalism and nationalism in 19th-century Europe – revolutions, independence and unification movements
- Europe by the end of the 19th century

2. Introduction to Modern Asian History

- Imperial rule and traditional China
- Challenges to Qing China in the 19th century – internal rebellion and external threat (Taiping Rebellion, First and Second Anglo-Chinese Wars)
- Traditions and changes of Tokugawa Japan in the 19th century
- Challenges to the Tokugawa Shogunate in the 19th 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 and communicate historical knowledge and judgements. Teachers will also use a variety of teaching aids to maximise the 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 data-based questions, written essays, presentations, class discussions, tests and formal examinations. Students will be required to conduct a historical investigation, which is a trimmed version of the one they will have to do for the IBDP History.

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. The 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 taught.

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

The teaching will integrate a variety of methods that will engage students in learning processes. 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

Course Description

The Preparatory Year Music course will challenge students to react to musical elements, devices and genres by posing generative questions to initiate discussion and assist students in finding a unique pathway for inquiry. Upon completion of the course, students will be expected to demonstrate:

1. knowledge, understanding and perception of music in relation to time, place and cultures
2. appropriate musical terminology to describe and reflect their critical understanding of music
3. comparative analysis of music in relation to time, place and cultures
4. critical-thinking skills through reflective thought
5. creative skills through exploration, control and development of musical elements
6. performance skills through solo or group music-making

Syllabus Outline:

Students will be taught the essential developments in western European art music (baroque, classical and romantic) with listening assignments, analyses of scores, composition exercises and a general exploration of the societies in which composers worked. These activities will be synthesized for each period of music.

Running parallel to the above will be an introduction to music from different cultures (e.g. African music, Caribbean music, Indian music, Latin American music) which will give further opportunities to appraise, compare and contrast musical styles.

Composition tasks are assigned to students on a regular basis. These tasks are related to the musical styles covered in the class. The performance element will usually not be classroom based.

Course Presentation

The style of learning activities will range between closed questioning (such as specific questions in aural awareness exercises) to open-ended challenges (such as a composition brief where the student will take ultimate control of the outcome). A variety of approaches will be used: teacher-directed, teacher-initiated, student-developed, and student-controlled.

Assessment

There will be a mixture of formative and summative assessment tasks: the former completed either in class or as a homework assignment; the latter in timed examinations is made up of two listening examinations and one music composition.

Prerequisites

Students who are curious about a range of historical, cross-cultural and indigenous perspectives relating to the development of global music cultures are all welcome to the Pre-IB music course.

Independent Learning and Thinking (ILT)

Course Description

This course aims to expand students' critical and reflective thinking skills to facilitate independent inquiry and reflection. In addition, students will 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 the exploration of topics including but not limited to current affairs, social issues and controversial matters as well as develop their skills of academic writing. Other focuses of the course will include research techniques and data analysis.

Course Presentation

In essence, the course will provide a platform for students to develop a skill set which will enable them to work independently. The topics mentioned above will be explored through teacher-facilitated discussion, student-led discussion and independent work. Students will also be given the chance to engage in personal reflection and to express their thoughts and/or ideas on a regular basis.

Assessment

The course is non-examinable. An ongoing formative evaluation of students' performance and understanding will be done through individual journal response writing, online discussion, and in-class group interaction.

Prerequisites

Students should be able to communicate and express their ideas comfortably in both oral 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) component. To achieve this, PYEL focuses on students achieving the following learning outcomes by the end of the year:

- Have initiated their own experiences.
- Have engaged in experiences where teamwork and cooperation are necessary.
- Have engaged with and have greater understanding of sections of the community outside SPCC, especially those with different or greater needs than themselves.
- Have an increased awareness of their strengths and areas for development.
- Have taken part in new and challenging experiences.

In order to achieve this, students are expected to spend approximately 70 hours of time engaged in 3 separate experiences as follows:

- A community service experience.
- A sporting experience that develops their fitness or skill.
- An experience that involves expressing their creativity through the visual or performing arts.

Although some experiences may involve, for instance, both sport and service, students must choose **three** separate experiences, each with a separate and specific focus.

One of these experiences **MUST** take place during Student Activities Week.

Content Presentation

Students will receive a briefing and handbook 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 reflections. Student reflections will be assessed at the end of the year and graded either pass or fail, in line with the grading system employed for CAS.

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:

Attend the F.3 IB Information Evening on 8th Dec.,2017.



Fill in the meeting request form on the last page of this booklet and return it to the Form-teacher at the latest by 15th December, 2017.



Receive academic counseling from the IB coordinator between January to March, 2018.



Complete the F.4 Preparatory Year Application Form which will be given out in March, 2018 and return it to the school on or before the deadline of 23rd April, 2018.



Release of application result on 1st August, 2018.

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 aptitudes. Their rank order in the internal examinations may also be considered.



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 **15th December 2017** so that a meeting with Ms Jennifer Lo, the IB Coordinator, can be arranged.

Name of student: _____ Form 3 _____

Signature: _____

Name of parent: _____

Signature of parent: _____

Date: _____

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 personalities.

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 details the assessment components and their nature of each of the IB subjects that he/she intend to study. This will help them to have 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 → 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 extra-curricular activities.

8. Can one decide to do the IBDP only 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 on the Preparatory Year. After this deadline, it is no longer possible to change to an 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 Ms Jennifer Lo, the Vice-principal. You may also find it useful to explore the IB website to learn more about this international community. Visit www.ibo.org. There are also IB related reading matters in the school library for you to get acquainted with this curriculum.

