

**High School  
Book of Course  
Descriptors  
Grades 9 to 12**

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## **Grade 9 Handbook of Studies**

### **General Introduction**

Students in Grade 9 start on a two year programme for the MYP certificate, studying courses from eight subject areas: English, World Languages, Humanities, Science, Mathematics, Technology, Arts and PE. A subject area may offer several courses - into which a student may choose to go, be placed by the school according to ability level or study in a trimester rotation.

Each subject is graded 1 to 7. To achieve an MYP certificate a student must achieve an average of a 4, and no grade below 3 in any subject. In addition, they must complete Community and Service hours and a Personal Project which they begin at the end of Grade 9.

In each week, students have 1600 minutes of instructional time divided into forty 40-minute periods - eight each day. Most periods are arranged in doubles of 80-minute blocks. Students study English for 240 minutes, World Languages for 200 minutes, Humanities for 200 minutes, Science for 240 minutes, Mathematics for 200 minutes, Technology for 160 minutes, Arts for 160 minutes, and PE for 160 minutes. There is an additional homeroom period of 40 minutes each week.

English is divided three levels according to language proficiency: English A, English B Advanced and English B Standard. Students are placed on entering the school according to a test, and subsequently change levels based upon their on-going performance.

Students may choose one of the following World Languages: Chinese, German, Japanese, Korean and Spanish. There are four levels of Chinese – Chinese A, Chinese B Advanced, Chinese B Standard and Chinese B Foundation; on entering the school students who choose this option are placed in an appropriate level according to a test. German and Korean are only available to native speakers, while Spanish is only available at a beginner level. Japanese is divided into two levels – native speakers and beginners.

Humanities is a single course incorporating units of History and Geography. Science is similarly a single course with units of Biology, Chemistry and Physics. Technology is divided into three trimester courses with specialist teachers in each, while Arts students make a choice at the beginning of the year from Visual Art, Drama or Music and stick with their single choice for two years. PE is a year long course.

## **English**

### **English A (9)**

English A is designed for fluent English speakers. Students develop reading, writing, speaking, and analytical skills through guiding questions derived from the five Areas of Interaction of the Middle Years Program. They examine a range of texts including novels, short stories, poetry, and visual media, developing an awareness of the purpose, use, and application of different styles of language and apply this knowledge to their own visual, written and oral communication.

Ongoing assessment takes place according to the MYP Language A criteria through a variety of tasks, including analysis of written and visual texts, reading comprehension, oral presentations, creative writing, and persuasive essays.

### **English B Advanced (9)**

Students develop reading, writing, speaking, and analytical skills through guiding questions derived from the five Areas of Interaction of the Middle Years Program. They examine a range of texts including novels, short stories, poetry, and visual media, developing an awareness of the purpose, use, and application of different styles of language and apply this knowledge to their own visual, written and oral communication. Ongoing assessment takes place through a variety of tasks, including analysis of written and visual texts, reading comprehension, oral presentations, creative writing, and persuasive essays.

### **English B Standard (9)**

Students complete four units, each of which develops their reading, writing, speaking and listening skills. They read a variety of interesting, informative or humorous texts and dialogues together with four books per year plus ten minutes of Free Voluntary Reading each class. They also listen and respond to imaginative and appealing topics such as Growing Up, Lost Worlds and Films which provide an insight into different aspects of culture throughout the English-speaking world. They have speaking and writing tasks and projects. At the completion of each unit, students are assessed through the Language B Standard criteria of oral communication (message and interaction / language), writing (message and organization / language) and reading comprehension.

## **World Languages**

### **Chinese A (9)**

九年级 A 班在整个一年的学习中，他们将要学习现代散文、现代短篇小说、戏剧、议论文和古文五个单元的内容。在这几个单元里，学生们将要了解散文的特点、散文的种类以及散文的形式，议论、说明、抒情、叙述、描写等表达方式在文体中的运用；小说是怎样反映社会生活的等相关知识点。学生们还将了解戏剧的特点、种类，戏剧文学的主要艺术特征以及人物对白、舞台说明等在剧本创作中的重要作用，并且通过创作和表演加强知识技能的运用。在议论文单元中，学生将了解议论文的特点和种类，掌握议论文的三要素和结构形式以及相应的论文写作技巧。在古文单元里，学生们要熟记一些名词丽句，了解中国的一些历史，初步了解中国古代政治上的君臣关系，诸葛亮的政治观点和他尽忠职守的故事等等。鉴于此，学生们在整个一年的中文学习中要完成相关的练习，短篇小说的创作，戏剧剧本的编写及表演，基于文学作品的写作，以及命题半命题等文章的练习等等，还将开展例如看电影，写影评，辩论，海报等活动，通过这些来评估学生们对所学内容的掌握情况。

### **Chinese B Advanced (9)**

Students study the following topics: Traditional Chinese customs and values, World Cultures and Celebrity, Natural world, and Technology through poetry, works of literature, other texts and

audio/videos. Students learn to describe literary characters, analysis of a literature/historic figure, understand and appreciate poems, figure out the structure of the novel, and understand the methods of present exposition and argumentative treatises. They are assessed through group argument/discussion, survey, interview, essay writing, literature works reading and posters presentations.

### **Chinese B Standard (9)**

Students study the themes of school, after school life, travelling, health, technology, part-time work, relationships, environmental and social issues. To improve their oral expression they accumulate vocabulary and learn more complex grammar structures. They develop skills in written commentary, letter and diary writing, reading travel brochures and flight timetables, writing a note for a notice board, designing and writing a report and survey, using computer technology as a communication tool and so on. Thus mastering skills of social communication and expressing themselves confidently. Students are assessed through dialogues with the teacher, group discussions, posters, brochures, texts handling and written productions.

### **Chinese B Foundation (9)**

Students learn pinyin as a basic writing tool and also to express themselves orally in basic biographical information about themselves, family, pets, daily routines and their homes. They also learn to count and tell time, to talk about countries, foods and sports. The prime focus of the course is to build vocabulary and improve fluent speaking, reading and writing, pure pronunciation. Students also work on writing skills through composing short notes, letters and diary entries. Students are assessed through dialogues with the teacher, group discussions, posters, brochures, texts handling and written productions.

### **German A (9)**

Es werden die Themen „Kriminalgeschichten“, „ Erörtern“, „Vorurteile/Stereotype“, „Satire“, „Kurzgeschichten“, „Lyrik“ und „Kommunikation“ behandelt. Die Schüler lernen verschiedene Erörterungsformen sowie den Aufbau einer Erörterung kennen, untersuchen argumentative Texte und verfassen eigene Texte. Sie beschäftigen sich mit formalen und inhaltlichen Merkmalen von Prosatexten und lyrischen Texten. Sie untersuchen Darstellungsformen literarischer Figuren. Ferner beschäftigen sie sich mit Funktionen der Kommunikation und deren Störungen.

### **Japanese A (9)**

Students develop analysis, comprehension, organization, and presentation skills as they explore current, global issues. In Unit 1, students investigate the ethical dilemmas surrounding mercy killing and mercy stealing. In Unit 2, students explore how to make a positive impact on society. In Unit 3, they discuss group psychology and the dynamics that impact the actions of a group. In Unit 4, students explore how positive human relationships develop. In Unit 5, they investigate what is behind the success of individuals and the role decision-making plays in their achievements. And in Unit 6, students discuss the relationships between religions and how religions impact the development of society. Each unit includes written assessment tasks incorporating organizational and language skills; several units also include oral assessments.

### **Korean A (9)**

Students develop key analytical, organizational and presentation skills. In the first unit, Human Ingenuity, students learn to recognize and appreciate cultural differences. In the second unit, Health and Social Education, they study the relationship between languages and society. In the third unit, Community and Service, students explore ways they can make society better. In the fourth unit, Environment, they investigate the benefits and consequences of development. In each unit, students analyze modern world and Korean literary works, while developing a personal appreciation of literature. They develop an understanding of the techniques involved in literary criticism and focus on key language skills: reading, writing, speaking, and presenting. All units include assessments in each of these skill areas.

### **Spanish B (9)**

Students continue to develop basic communication skills. In Unit 1, students explore food, meals, and healthy living. In Unit 2, they discuss places in the community and leisure activities. In Unit 3, students talk and write about family celebrations and holidays. In Unit 4, they discuss types of housing and household chores. And in Unit 5, students talk about shopping and gift-giving. In each unit, students memorize and practice vocabulary and grammar concepts related to the unit theme. Within these units, students explore the culture of Spanish-speaking countries and focus on key language skills: reading, writing, listening, speaking, viewing, and presenting. All units include assessments in each of these skill areas, with a focus on reading, writing, and speaking. At the end of the course, students will be able to express themselves in familiar situations.

## **Humanities**

### **Humanities (9)**

Through the theme of CHANGE Students discover how both human ingenuity and natural forces have changed and shaped their world. In Semester One, students compare and contrast the French, Russian and Chinese Revolutions, and study how countries develop and change and the reasons for differences. In Semester Two they study how change in the USA occurred peacefully, the management of freshwater resources. They look at how societies and environments have changed and make judgments on whether or not this change has had a positive or negative impact on them, their community and their world. Assessment is based on both formative and summative tasks, united in their scope of appeal to different learning styles and preferences. Students also do self evaluation and peer evaluation exercises.

## **Science**

### **Science (9)**

Students explore the themes of Patterns and Structure, and Energy. In Semester One, they study the structure of plant and animal cells as well as the transportation of materials, to

classify and separate mixtures and explore the types of atoms and bonding involved. Also, students learn the workings of the SI system of measurement and develop a practical sense of how to treat and manipulate data while studying the movements of objects. In Semester Two, students assess the impact that humans have had on the environment resulting from the continual expense of energy. They also explore how substances absorb or release different quantities of heat and calculate these amounts quantitatively. Lastly, students learn how different forms of energy can be converted to one another but are ultimately conserved.

## **Mathematics**

### **Mathematics Extended (9)**

Students study Algebra (linear, quadratic and simultaneous equations and formulae factorization), Surds and Indices, Coordinate Geometry, Surface Area and Volume, Pythagoras' Rule, Trigonometry, Euclidean Geometry, Statistics and Probability. Extended students also study extensions to these topics. The focus is on applying mathematical methods to real life problems and using technology as an alternative to traditional problem solving techniques. The skills involved include manipulating algebraic equations, applying theorems in deductive geometry and using a graphic calculator to solve complex functions and interpret statistical data. Assessment is by two examinations and a series of assessment tasks which require the students to apply these mathematical skills, recognize patterns as well as communicate, reason and reflect on their results.

### **Mathematics Standard (9)**

Students study Algebra (linear, quadratic and simultaneous equations and formulae factorization), Surds and Indices, Coordinate Geometry, Surface Area and Volume, Pythagoras' Rule, Trigonometry, Euclidean Geometry, Statistics and Probability. The focus is on applying mathematical methods to real life problems and using technology as an alternative to traditional problem solving techniques. The skills involved include manipulating algebraic equations, applying theorems in deductive geometry and using a graphic calculator to solve complex functions and interpret statistical data. Assessment is by two examinations and a series of assessment tasks which require the students to apply these mathematical skills, recognize patterns as well as communicate, reason and reflect on their results.

## **Technology**

### **Materials Technology (9)**

Students study a variety of materials including timber, plastics and metals. They learn to research relevant information, formulate design ideas and use these ideas to plan and create a solution to a given design challenge. In addition, they learn practical skills such as cutting, forming and joining of materials. At the completion of each topic, students are assessed through the Design Cycle criteria of Investigation, Design, Plan, Create, Evaluate and Attitudes in Technology.

### **Computer Technology (9)**

Students study problem solving using computer hardware and software. They learn to research appropriate information, design ideas and use these ideas to plan and create a solution to a given design challenge. In addition, they learn practical skills such as interface design, database design and animation techniques. At the completion of each topic, students are assessed through the Design Cycle criteria of Investigation, Design, Plan, Create, Evaluate and Attitudes in Technology.

### **Food Technology (9)**

Students study how to design and make a novelty biscuit that could be sold in a shop. They learn to research appropriate information, design ideas and use these ideas to plan and create a solution to a given design challenge. In addition, they learn practical skills such as bread and cake-making. At the completion of each topic, students are assessed through the Design Cycle criteria of Investigation, Design, Plan, Create, Evaluate and Attitudes in Technology.

## **The Arts**

### **Visual Art (9)**

Students demonstrate an understanding of how and why artists create. They develop the skills of ceramics, jewellery, oil painting and use of mixed media. They record and analyse their research in workbooks and develop and make their own designs. They use the elements and principles of art to describe, analyse examples found during research and to explain their design. Students ask each other for feedback and may use that to modify and refine their designs. Both the students final artwork and the preparatory work are assessed. This includes the scope and quality of the research and its analysis, the development of the design and how it was influenced by research and peer comments, their journal describing the process and evaluation, and the effectiveness of the final outcome.

### **Music (9)**

Students look at several musical cultures, analysing and identifying common elements. They examine musical structures so they can compose rhythmic and melodic sketches. They use melody and harmonic progressions to explore harmony. They also learn the four related music fundamentals of beat, rhythm, accent, meter and develop the skill to identify these elements in given music examples. Students identify the various roles that music plays in different societies from historical, cultural, ritual and commercial perspectives. They examine and compare the roles and influences that music has on today's societies. They discuss how pop music is perceived internationally and its influences from a global perspective.

### **Drama (9)**

Students develop their skills in performing scripts and examining contemporary issues in these scripts, examining Absurdist Theatre and texts. Students create and develop short films and integrate their MacBook into Drama during the Technical theatre topic. They also write thorough weekly reflections and show knowledge and understanding of the different skills and

genre taught through regular written work for each unit.

### **Physical Education**

#### **PE (9)**

Students study the health-related fitness and main components of basketball, floor hockey, badminton, track and field, softball, pickle ball, swimming, touch football, soccer, table tennis, and ultimate Frisbee. Students to design two creative performances in synchronized swimming and skipping, a fitness training program and a program designed to help skill development for participation in a sports team. Students develop and perform more complex skills and strategies in modified and authentic game situations. Students learn to understand group dynamics and develop leadership skills.

## **Grade 10 Handbook of Studies**

### **General Introduction**

Students in Grade 10 complete their two year programme of study for the MYP certificate, studying courses from eight subject areas: English, World Languages, Humanities, Science, Mathematics, Technology, Arts and PE. A subject area may offer several courses - into which a student may choose to go, be placed by the school according to ability level or study in a trimester rotation.

Each subject is graded 1 to 7. To achieve an MYP certificate a student must achieve an average of a 4, and no grade below 3 in any subject. In addition, they must complete Community and Service hours and a Personal Project which they begin at the end of Grade 9.

In each week, students have 1600 minutes of instructional time divided into forty 40-minute periods - eight each day. Most periods are arranged in doubles of 80-minute blocks. Students study English for 240 minutes, World Languages for 200 minutes, Humanities for 200 minutes, Science for 240 minutes, Mathematics for 200 minutes, Technology for 160 minutes, Arts for 160 minutes, and PE for 160 minutes. There is an additional homeroom period of 40 minutes each week.

English is divided three levels according to language proficiency: English A, English B Advanced and English B Standard. Students are placed on entering the school according to a test, and subsequently change levels based upon their on-going performance.

Students may choose one of the following World Languages: Chinese, German, Japanese, Korean and Spanish. There are four levels of Chinese – Chinese A, Chinese B Advanced, Chinese B Standard and Chinese B Foundation; on entering the school students who choose this option are placed in an appropriate level according to a test. German and Korean are only available to native speakers, while Spanish is only available at a beginner level. Japanese is divided into two levels – native speakers and beginners.

Humanities is a single course incorporating units of History and Geography. Science is similarly a single course with units of Biology, Chemistry and Physics. Technology is divided into three trimester courses with specialist teachers in each, while Arts students make a choice at the beginning of the year from Visual Art, Drama or Music and stick with their single choice for two years. PE is a year long course.

## **English**

### **English A (10)**

Students practice and refine their reading, writing, speaking, listening, and viewing and presentation skills. They focus on an overarching topic, fuelled by a specific area of interest,

through a variety of texts of different genres, time periods and cultures. Students learn to understand and comment critically on the language, content, structure, meaning and significance of both familiar and previously unseen pieces of writing. They use language to narrate, describe, analyse, explain, argue, persuade, inform, entertain and express feelings. Students work independently as well as collaboratively. Students are assessed through a personal response to literature, an analytical essay, a piece of creative writing, oral and visual assignments.

### **English B Advanced (10)**

In each unit, based on a variety of texts, students explore a guiding question, which stimulates discussion and other learning activities. Students improve upon their oral and written skills in independent, small and large group settings. Grammar and writing activities and assessments, and also oral activities and assessments form the basis of the units of work. Assessments are summative and formative which include oral presentations and discussions, written assessments which include creative, text based and research writing pieces.

### **English B Standard (10)**

Students read a different novel for every unit. They link the themes of these novels to relevant historical events which they will research on the internet. For each unit, they discuss and debate issues related to the themes in their novels. They write discursive essays based on their debates as well as give oral presentations on these themes. They watch films based on or related to the novels they have read and write a personal response to each of these films.

## **World Languages**

### **Chinese A (10)**

十年级 A 班在整个一年的学习中，他们将要学习《向青春举杯》、《月是故乡明》、《像山那样思考》、《珍爱生命》、《和平的祈祷》、《历史的回声》等六个单元的内容。在这些单元中所涉及的体裁是多样的，除了继续进行各种体裁作业的练习外，学生们将要注重在以下几个方面来提高自己的学习能力：1、进行一次珍爱人生的小组讨论活动。学生在这个单元中继续讨论了人生、价值观、活着的意义等话题，通过活动体验，学生明白：生命，对每个人来说只有一次，敬畏生命，善待生灵，热爱生活，把个人有限的生命融入到丰富的世界中去，这样的人生才有价值。2、学生们将会通过学习而知道：为了能有永久的和平，人类必须正视战争造成的苦难，如何制止战争，以及记住历史留给我们的经验教训。3、进行一次人生体悟的创作练习。学生在这个单元中讨论了人生、价值观、青春等话题，通过活动体验，学会用对话的方式与父母、师长及同辈人进行心灵沟通。4、学生们将要学会夹叙夹议的写作方法以及掌握议论文的写作灵魂---鲜明的观点。鉴于此，学生们在整个一年的中文学习中要完成相关的练习，文学创作，基于文学作品的写作，以及命题半命题等文章的练习等等，还将开展例如辩论，海报等活动，通过这些来评估学生们对所学内容的掌握情况。

**Chinese B Advanced (10)**

Students develop key reading, writing, and speaking skills. In the first unit, students talk and write about classroom and extracurricular activities. They discuss society, countries, family, education and historical figures. They develop skills such as narration, disputation, explanation and poetry appreciation. Students memorize and practice vocabulary and grammar concepts. Within each unit, students explore the culture of Chinese-speaking countries and focus on key language skills: reading, writing, listening, speaking, viewing, and presenting. All units include assessments in each of these skill areas, with a focus on reading, writing, and speaking.

**Chinese B Standard (10)**

Students study topics on health, the technological world, social and environmental issues. They improve presentation skills, vocabulary and grammar. They also learn to comment, write letters and diaries, read travel brochures and flight timetables, design and writing a report and survey and use computer technology as a communication tool. By doing so, they improve their fluency in speaking, reading and writing. Students are assessed through dialogues, group discussions, posters, brochures and written productions.

**Chinese B Foundation (10)**

Students study pinyin, personal Introductions, numbers, family, pets, countries, foods, sports, daily routines and clothes. Students improve fluent speaking, reading and writing and pronunciation. Students develop writing skills for short notes, letters and diaries. They are assessed through dialogues, group discussions, short plays, posters and brochures.

**German A (10)**

Es werden die Themen „Kriminalgeschichten“, „ Erörtern“, „Vorurteile/Stereotype“, „Satire“, „Kurzgeschichten“, „Lyrik“ und „Kommunikation“ behandelt. Die Schüler lernen verschiedene Erörterungsformen sowie den Aufbau einer Erörterung kennen, untersuchen argumentative Texte und verfassen eigene Texte. Sie beschäftigen sich mit formalen und inhaltlichen Merkmalen von Prosatexten und lyrischen Texten. Sie untersuchen Darstellungsformen literarischer Figuren. Ferner beschäftigen sie sich mit Funktionen der Kommunikation und deren Störungen.

**Japanese A (10)**

Students develop analytical, comprehension, organization, and presentation skills as they explore current, global issues. They investigate and discuss the ethical dilemmas surrounding mercy killing and mercy stealing, how to make a positive impact on society, group psychology and the dynamics that impact the actions of a group, how positive human relationships develop, what is behind the success of individuals and the role decision-making plays in their achievements. Finally, students discuss the relationships between religions and how religions impact the development of society. Each unit includes written assessment tasks incorporating organizational and language skills; several units also include oral assessments.

**Korean A (10)**

Students develop key analytical, organizational, and presentation skills. In Unit 1, Environment,

students explore modern environmental problems. In Unit 2, Community and Service, they investigate ways to help alienated people. In Unit 3, Human Ingenuity, students investigate the benefits and problems of modern technology. In Unit 4, Health and Social Education, they research an area of personal interest and present a persuasive argument. In each unit, students analyze modern world and Korean literary works, while developing a personal appreciation of literature and practicing essential techniques involved in literary criticism. Within these units, students learn ways to approach and study literature and focus on key language skills: reading, writing, speaking, and presenting. All units include assessments in each of these skill areas.

### **Spanish B (10)**

Students develop communication skills. In Unit 1, they explore classroom and extracurricular activities. In Unit 2, they discuss shopping and special events. In Unit 3, students talk and write about activities and locations in a city. In Unit 4, they discuss childhood and holiday celebrations. In Unit 5, students explore current events in the news and emergency situations. And in Unit 6, they talk and write about popular entertainment. In each unit, students increase their knowledge of vocabulary and grammar concepts. Students also explore the culture of Spanish-speaking countries and focus on key language skills: reading, writing, listening, speaking, viewing, and presenting. All units include assessments in these skill areas, with a focus on reading, writing, and speaking. At the end of the course, students can express themselves on a variety of topics.

## **Humanities**

### **Humanities (10)**

Grade 10 units of study center on the common theme of Global Harmony to enable students to strengthen their conceptual understanding of the relationships between people and their natural environments. In Semester One, students study the impact urbanization, the world wars and military technologies have had on past and present societies. In Semester Two, students study landforms, energy resources and contemporary management issues. Students analyze the reasons behind the Cold War and Arab-Israeli conflict and how differing beliefs affect the balance of global harmony. Teachers assess students through tests, essays, research projects and class discussions.

## **Science**

### **Science (10)**

In Semester One, students complete three topics related to the central concept of change. In biology, they study genetics with respect to the scientific principles involved and medical and commercial applications. In chemistry, they investigate why chemical reactions proceed at different speeds and how the ideas of chemical kinetics find commercial applications. In physics, they study waves, light, sound and the basics of nuclear physics. These topics improve skills in communication, investigation as well as developing skills of application, synthesis and evaluation. The course grade is determined by the student's performance in writing about

science in society, planning and carrying out investigations and tests and examinations.

## **Mathematics**

### **Mathematics Standard (10)**

Students study five strands of Mathematics: Number, Algebra, Geometry and Trigonometry, Statistics and Probability, and Discrete Mathematics. Students focus on solving practical problems and applying methods to real world examples. They construct and interpret graphs, solve and manipulate equations, problem solve, apply formulae to real life problems, use technology to solve optimisation problems, and apply theorems and proofs to deductive geometry questions. Students are assessed through examinations and investigation tasks.

### **Mathematics Extended (10)**

Students study five strands of Mathematics: Number, Algebra, Geometry and Trigonometry, Statistics and Probability, and Discrete Mathematics. Students focus on solving practical problems and applying methods to real world examples. They construct and interpret graphs, solve and manipulate equations, problem solve, apply formulae to real life problems, use technology to solve optimisation problems, and apply theorems and proofs to deductive geometry questions. Students are assessed through examinations and investigation tasks. Extended students have extension tasks

## **Technology**

### **Material Technology (10)**

Students study mechanisms, learning to research appropriate information, design ideas and use these ideas to plan and create a solution to a given design challenge. In addition, they learn practical skills such as marking, shaping, joining and finishing using wood materials. At the completion of each topic, students are assessed through the Design Cycle criteria of Investigation, Design, Plan, Create, Evaluate and Attitudes in Technology.

### **Computer Technology (10)**

Students problem solve using computer hardware and software. They learn to research appropriate information, design ideas and use these ideas to plan and create a solution to a given design challenge. In addition, they learn practical skills such as web design, interactivity, image manipulation and further animation techniques. At the completion of each topic, students are assessed through the Design Cycle criteria of Investigation, Design, Plan, Create, Evaluate and Attitudes in Technology.

### **Food Technology (10)**

Students study how to design and make food products to industry standard. They learn to research appropriate information, design ideas and use these ideas to plan and create a solution

to a given design challenge. In addition, they learn practical skills such as the storage and handling of materials and equipment. At the completion of each topic, students are assessed through the Design Cycle criteria of Investigation, Design, Plan, Create, Evaluate and Attitudes in Technology.

## **Arts**

### **Visual Art (10)**

Students demonstrate an understanding of how and why artists create. They develop the skills of ceramics, jewellery, oil painting and use of mixed media. They record and analyse their research in workbooks and develop and make their own designs. They use the elements and principles of art to describe, analyse examples found during research and to explain their design. Students ask each other for feedback and may use that to modify and refine their designs. Both the students' final artwork and the preparatory work are assessed. This includes the scope and quality of the research and its analysis, the development of the design and how it was influenced by research and peer comments, their journal describing the process and evaluation, and the effectiveness of the final outcome.

### **Music (10)**

Students learn to create music, exploring how melodies can be varied in many different ways to create new compositions. They also study harmonic progressions with special emphasis on the "12 Bar Blues", and then their own "12 Bar Blues". In Semester Two, students study ethnomusicology to gain a deeper understanding of how music functions in different societies and their cultures. They learn different musical instrument classification systems to allow them to study and understand musical instruments of the world.

### **Drama (10)**

Students study renowned theatre practitioners such as Bertolt Brecht, Augusto Boal, as well as Greek and Shakespearean tragedy. They have more responsibilities during the rehearsal process and are required to reflect thoroughly and with some sophistication on the rehearsal process and their performance growth.

## **Physical Education**

### **PE (10)**

Students study the health-related fitness and main components of basketball, floor hockey, badminton, track and field, softball, pickle ball, swimming, touch football, soccer, table tennis, and ultimate Frisbee. Students to design two creative performances in synchronized swimming and skipping, a fitness training program and a program designed to help skill development for participation in a sports team.

## **Grade 11 Handbook of Studies (IB Diploma)**

### **General Introduction**

In Grade 11, students start the first year of their International Baccalaureate Diploma. All courses are graded on a 1 to 7 scale, with 7 being the highest awarded. To gain a full Diploma students must complete one subject from each of the six groups, with an average of 4 points per subject and no subject must score below 3. Students must complete at least three subjects at a Higher Level (HL), scoring at least 4 in each. The other three subjects can be Standard Level (SL).

In addition, students must pass the Theory of Knowledge course and complete an Extended Essay to a satisfactory standard. They must also complete 150 hours of Creativity, Action and Service (CAS) over the two years of the course.

## **English**

### **English A1 IB HL (11)**

Students study a variety of texts which covers poetry, drama, fiction, and non-fiction prose. Readings include titles such as Shakespeare's *Hamlet*, Sophocles' *Oedipus Tyrannus*, the poetry of John Keats, Hardy's *Tess of the d'Urbervilles*, Woolf's *To the Lighthouse*, and Tolstoy's *Anna Karenina*. Assessment tasks include oral presentations and commentaries; written commentaries; comparison-contrast essays; and essay examinations. Higher Level students write two World Literature essays (1500 words each) and study 15 texts.

### **English A1 IB SL (11)**

Students study a variety of texts which covers poetry, drama, fiction, and non-fiction prose. Readings include titles such as Shakespeare's *Hamlet*, Sophocles' *Oedipus Tyrannus*, the poetry of John Keats, Hardy's *Tess of the d'Urbervilles*, Woolf's *To the Lighthouse*, and Tolstoy's *Anna Karenina*. Assessment tasks include oral presentations and commentaries; written commentaries; comparison-contrast essays; and essay examinations. Standard Level students write one World Literature essay (1500 words) and study 11 texts.

### **English A2 IB HL (11)**

The language A2 syllabus consists of the study of language, texts and culture, which is made possible through the framework of culture and literary options. In the language A2 course students have the opportunity to develop and refine the four primary language skills: listening, speaking, reading, and writing. Throughout the course, students are exposed to a wide range of types of texts. Students are expected to compare and contrast aspects of language, texts, and culture. Assessment for Higher Level and Standard Level: Written Paper Component – External Assessment (50%), Written Tasks – External Assessment (20%), Individual Oral (15%), Interactive Oral (15%).

### **English A2 IB SL (11)**

The language A2 syllabus consists of the study of language, texts and culture, which is made possible through the framework of culture and literary options. In the language A2 course students have the opportunity to develop and refine the four primary language skills: listening, speaking, reading, and writing. Throughout the course, students are exposed to a wide range of types of texts. Students are expected to compare and

contrast aspects of language, texts, and culture. Assessment for Higher Level and Standard Level: Written Paper Component – External Assessment (50%), Written Tasks – External Assessment (20%), Individual Oral (15%), Interactive Oral (15%).

### **English B IB HL (11)**

Students prepare in all the four language skills. They use Objective IELTS Advanced” as a basic course book as this covers the processing and production of academic English texts . They also read a range of short literary works including “Animal Farm” & “A Twist in the Tail”. They watch films such as – “Animal Farm”, “Dead Poet’s Society”, Cold Mountain”. They practice skills in interactive orals, debating, speech making and news reporting. They also learn to analyse plots and characters and understand the cultural context of the literary works. The students take practice IBD exams using past papers and also take practice IELTS, SATs & TOEFL tests.

## **World Languages**

### **Chinese A1 IB HL (11)**

十一年级中文A1普通课程内容包括七部中外文学作品以及一些补充文本，题材涉及散文、诗歌、戏剧和小说。具体篇目有：《呼啸山庄》、《德伯家的苔丝》、《围城》、《包法利夫人》、《哈姆莱特》、《中国现当代散文选》、《中国现当代诗歌选》等。主要知识点包括：作家背景与作品的联系，叙事性作品的人物形象分析，作品主题意蕴的发掘，情节结构的设置，环境描写以及各种艺术手法的综合运用；抒情性作品的思想情感领悟，结构线索，语言风格以及诗歌散文中常用的艺术技巧等。课程主要培养学生对学过或没学过的叙事性作品以及抒情性作品的独立鉴赏分析能力，能够连贯、有逻辑性的进行学术性写作和口头表达的能力以及能够对出自不同年代或不同文化的文学作品做比较鉴赏的能力。通过大量文学观念的讲授拓展学生的文学文化意识。同时运用小组讨论、论文写作、电影与原著的比较欣赏以及口头评论等日常作业形式引导学生探究作品。评估形式主要包括定期论文写作、口头表达以及正式考试。中文A1高级课程学生会在此基础上增加学习两部作品《雷雨》和《西厢记》。

### **Chinese A2 IB HL (11)**

11 年级 A2 的学生在整个第一学年的中文学习中，他们将要学习四个单元的内容，即小说、散文、诗歌以及戏剧。除了文学以外学生们还将要涉及一些社会问题的讨论，例如媒体与文化讨论---广告、以及全球问题---环境等。小说这一个单元，其中包括《边城》、《儿子的否决权》、《高个女人和她的矮丈夫》等五篇文章的学习。通过小说单元的学习，学生已知与小说有关的文学常识，例如小说的分类、特征等等。在此学习的基础上，我们进行了一次作文练习，尝试写作对文章的解读。散文这个单元，其中包括余秋雨的《文化苦旅》中的《道士塔》、《阳关雪》，朱自清的散文《桨声灯影里的秦淮河》、《荷塘月色》、《绿》。通过散文单元的学习，学生已知了散文体裁的特点，在此基础上，我们进行了一次作文练习，并进行了评估。诗歌单元主要是学习徐志摩的几首诗，了解徐志摩的生平及创作特点，感悟诗的魅力。戏剧单元主要是学习《茶馆》和《雷雨》两部喜剧。每个单元学习后，都要进行相关的练习来巩固所学的内容。学生还将充分了解整个 DP 学习过程中的中文 A2 的要求，尝试一些相关练习，例如如何完成 written task，各种文体的相关知识，以及对考试试卷有个大概地了解。

### **Chinese B HL (11)**

Students develop basic reading, writing, and speaking skills. They study travel, family life and

community and complete a Chinese survey. Students memorize and practice vocabulary and grammar concepts and explore the culture of Chinese-speaking countries focusing on key language skills: reading, writing, listening, speaking, viewing, and presenting. The assessments include oral tests, text handling and written production. For Higher Level students, they add some local text to learn according to the students' factual level. They also focus on improving their skills to analyze and enjoy some simple literatures.

### **Chinese ai IB SL (11)**

The course focuses on the acquisition of language required for every day social interaction. Students study Individuals, Education and Work, Town and Services, Food and Drink, Leisure and Travel. Students are expected to communicate information and some basic ideas clearly and effectively, understand and use accurately the essential spoken forms, written forms and registers, and develop a basic awareness of the cultures using Chinese. Students practice individual speeches, group dialogues, role plays, reading about practical essays and writing in Chinese basic formats. Assessments include oral tests, text handling and written production.

### **German A2 IB HL (11)**

Angesichts der Tatsache, dass Schüler des Standard und des Higher Level in vier Stunden pro Woche gemeinsam unterrichtet werden, behandeln Schüler des HL ebenfalls die im SL genannten "options", jedoch erfolgt dies in einer vertiefenden Art und Weise. Für die Bewertung wird bei ihnen daher auch der strengere Maßstab des HL angelegt. Die zusätzliche "option", die von Schülern des HL im Laufe der 11. und 12. Klasse bearbeitet werden muss, wird über die gesamten zwei Jahre in den zusätzlichen zwei Stunden Deutsch pro Woche verteilt. Dabei handelt es sich um eine kulturelle "option", die unter dem Thema 'Medien und Kultur' steht und sich mit Formen der Zensur, unterschiedlichen Medien und ihrer Bedeutung für den Einzelnen und das Kulturleben, den medienbedingten Wandel kulturellen Lebens, Veränderungen in der Kommunikation, Kommunikationsmodellen und der Analyse von Reden beschäftigt.

### **German A2 IB SL (11)**

Der Standard Level umfasst in den Schuljahren 11 und 12 insgesamt drei "options" (zwei literarische und eine kulturelle). Da das zweite Semester der 12. Klasse der Vorbereitung auf das Examen dient, werden die zwei literarischen "options" im 11. Schuljahr behandelt. Die erste "option" beinhaltet Texte verschiedener Literaturgattungen zum Thema 'Liebe'. Dabei lernen die Schüler Methoden des analytischen und kreativen Umgangs mit Texten verschiedener Epochen der deutschen Literaturgeschichte und können sich auf diese Weise einen Begriff über die Vielschichtigkeit des literarischen Motivs "Liebe" machen. Durch Vergleiche mit anderen Texten werden ihnen sprachliche Besonderheiten und die Veränderung der Sprache im Laufe der Jahrhunderte aufgezeigt. Die zweite "option" trägt den Titel 'Jugend' und beschäftigt sich mit Texten, in denen das Aufwachsen von Kindern verschiedener Kulturkreise und Zeiten literarisch verarbeitet wird. Ebenso werden durch verschiedene methodische Ansätze im Umgang mit Literatur die mündliche Ausdrucksfähigkeit, der Wortschatz, die Lese- und die Schreibkompetenz weiter gefördert. Mindestens zwei Assessments pro Einheit, von denen jeweils mehrere die gesamte "option" bilden, bereiten auf das Examen vor. Sie überprüfen die Bereiche 'Sprache' (Hören, Lesen, Schreiben, Sprechen) und 'Umgang mit Texten' (Textverstehen, Methoden der Analyse verschiedener Textsorten).

### **Japanese A1 HL (11)**

Students study one World and nine Japanese literary works as they focus on developing analytical, comprehension, organization, and presentation skills. Students study how beauty and vice are realized in literary works, while focusing on critical reading skills needed to analyze

different genres of literature. In preparation for the IB assessments, students are assessed on oral and written literary commentary skills. Students explore the influences society has on women. Students focus on analytical and organizational skills and are assessed through the writing of comparative and creative essays, some of which are presented orally in preparation for the IB Internal Assessment.

### **Japanese A1 IB SL (11)**

Students study one World and four Japanese literary works as they focus on developing analytical, comprehension, organization, and presentation skills. Students study how beauty and vice are realized in literary works, while focusing on critical reading skills needed to analyze poems and drama. In preparation for the IB assessments, students are assessed on oral and written literary commentary skills. Students explore the influences society has on women. Students focus on analytical and organizational skills and are assessed through the writing of comparative and creative essays, some of which are presented orally in preparation for the IB Internal Assessment.

### **Japanese ai IB SL (11)**

In this beginners' course, students study Japanese characters and develop key linguistic skills by focusing on daily conversation and practicing vocabulary and grammar concepts. Students learn to exchange personal information in basic conversations, practice dialogues for inviting and visiting people, learn expressions used for shopping, discuss trips and food, discuss family relationships and learn to give directions and practice expressions used at a clinic or bank. Students focus on the grammar and vocabulary while exploring Japanese culture. Students are assessed through reading, written and oral tasks.

### **Korean A IB HL (11)**

Students develop an understanding of the techniques involved in literary criticism and a personal appreciation of literature. They explore a range of literary works from different periods, genres, styles and contexts. In the first unit, Paper 1 and Commentary, students learn how to analyze literary features, such as style, structural and linguistic elements, in prose and poetry. Students learn how to write and present a literary analysis. The focus of this unit is preparation for the literary commentary. In the second unit, Comparative Analysis, students prepare for the World Literature assignments and Paper 1 of the IB Exam. In this unit, students learn essential strategies for comparing literary works. Students focus on the structure and presentation of essays.

### **Spanish ai IB SL (11)**

Students learn to communicate at a basic level in Spanish. They learn basic conversation skills, discuss their favorite activities and friends, learn about school schedules and classrooms, discuss food, meals, and healthy living, discuss places in the community and leisure activities, talk and write about family celebrations and holidays, discuss household items and chores. Students memorize and practice vocabulary and grammar concepts. Students also explore the culture of Spanish-speaking countries and focusing on key language skills namely reading, writing, and speaking.

## Humanities

### **Business IB HL (11)**

Students gain an international perspective on business and promote their appreciation of cultural diversity through the study of a number of topics which are spread across six modules. They study four modules: Business Organization and Environment, Accounting and Finance, Marketing and Business Strategy. In these modules students learn about the structure of organizations and the different environments in which they operate, how organizations formulate marketing strategies and tactics to achieve organizational objectives and how they manage and use financial resources and information as decision making tools. They are assessed through a combination of case studies, research and presentation tasks, essay questions group work and end of semester examinations.

### **Business IB SL (11)**

Students gain an international perspective on business and promote their appreciation of cultural diversity through the study of a number of topics. In grade 11, students study three modules: Business Organization and Environment, Accounting and Finance and Marketing. In these modules they learn about the structure of organizations and the different environments in which they operate, how organizations formulate marketing strategies and tactics to achieve organizational objectives and how they manage and use financial resources and information as a decision making tools. Students are assessed through a combination of case studies, research and presentation tasks, essay questions group work and end of semester examinations.

### **Economics IB HL (11)**

Students study Microeconomics, Measuring National Income and Economic Growth. One important distinction is the difference between economic growth and economic development. Students will analyze macroeconomic news and suggest appropriate strategies for problems of unemployment or inflation. Students also analyze and apply models of the different market types.

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### **Geography IB HL (11)**

Students develop an understanding of the interrelationships between people, places, spaces and the environment. They study: populations in transition, disparities in wealth and development, patterns in environmental quality and sustainability, and patterns in resource consumption. They choose three optional themes from the following: Freshwater – Issues and Conflicts; Oceans and their Coastal Margins; Extreme Environments; Hazards and Disasters – Risk Assessment and Response; Leisure, Sport and Tourism; The Geography of Food and Health; and Urban Environments. In addition, there are seven compulsory Extension topics for HL

students. These include: measuring global interactions, changing space and the shrinking world, economic interactions and flows, environmental change, socio-cultural exchanges, political outcomes and global interactions at the local level.

### **Geography IB SL (11)**

Students develop an understanding of the interrelationships between people, places, spaces and the environment, a concern for human welfare and the quality of the environment, and an understanding of the need for planning and sustainable management; to appreciate the relevance of geography in analysing contemporary issues and challenges, and to develop a global perspective of diversity and change. Students study the topics of populations in transition, disparities in wealth and development, patterns in environmental quality and sustainability, and patterns in resource consumption. Students choose two optional themes from the following: Freshwater – Issues and Conflicts; Oceans and their Coastal Margins; Extreme Environments; Hazards and Disasters – Risk Assessment and Response; Leisure, Sport and Tourism; The Geography of Food and Health; and Urban Environments.

### **History IB HL (11)**

Students appreciate the nature and diversity of sources, methods and interpretations. They gather and sort evidence, evaluate it, understand historical processes and organize and express their ideas. They study *Peacemaking, Peacekeeping–International Relations 1918-36, Origins and Development of Authoritarian and Single-Party States* and *The Cold War*. In addition, Higher Level students study *The Interwar Years 1919-39, The Soviet Union and Eastern Europe 1924-2000* and *The Second World War and post-war Western Europe 1939-2000*. Objectives assessed are; knowledge and understanding, application and interpretation, synthesis and evaluation and their use of historical skills. There is emphasis on essay writing skills and source analysis.

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## **Science**

### **Biology IB HL (11)**

Students study the topics Statistical Analysis, Cells, The Chemistry of Life, Genetics, Ecology and Evolution, and Human Health and Physiology. Students develop the skills to analyze and communicate scientific information. This course covers the same topics as the HSD and SL courses but it covers much more content and the work is studied to a much greater depth.

Students develop laboratory skills by designing and carrying out experiments. The grade for this course is based on examinations and the assessment of the planning, conduct and writing up of a number of laboratory investigations. The weightings for the determination of the grade are examinations: 76%, Laboratory investigations 24%.

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### **Chemistry IB HL (11)**

Students start the course by learning quantitative chemistry in measuring and calculating amounts and yields. Students take an in depth look at Atomic Structure, patterning within the Periodic Table, and Chemical Bonding. Students explore the properties of chemical reactions within the next three units; the first being the heat changes that occur during the formation and breaking of bonds within new substances, the kinetics or factors affecting the speed of the reaction, and lastly, the dynamics within the equilibrium or factors that provide a balance to the reaction. The grade for this course is based on examinations (76%) and the assessment of the planning, conduct and writing up of a number of laboratory investigations (24%).

### **Chemistry IB SL (11)**

Students start the course by learning quantitative chemistry in measuring and calculating amounts and yields. Students take an in depth look at Atomic Structure, patterning within the Periodic Table, and Chemical Bonding. These three units explain why atoms behave the way they do in chemical reactions. Students explore the properties of chemical reactions within the next three units; the first being the heat changes that occur during the formation and breaking of bonds within new substances, the kinetics or factors affecting the speed of the reaction, and lastly, the dynamics within the equilibrium or factors that provide a balance to the reaction. Throughout the course, students perform several investigations and learn how to perform proper measurement and data processing skills.

### **Physics IB HL (11)**

Students study Mechanics and Thermal Physics, Oscillations and Waves and Electric Currents. Students develop the skills to analyse and communicate scientific information. They develop laboratory skills by designing and carrying out experiments. The grade for this course is based on examinations and the assessment of the planning, conduct and writing up of a number of laboratory investigations. The weightings for the determination of the grade are examinations: 76%, Laboratory investigations 24%.

### **Physics IB SL (11)**

Students study Mechanics and Thermal Physics, Oscillations and Waves and Electric Currents. Students develop the skills to analyze and communicate scientific information. Students develop laboratory skills by designing and carrying out experiments. The grade for this course is based on examinations and the assessment of the planning, conduct and writing up of a number of laboratory investigations. The weightings for the determination of the grade are examinations: 76%, Laboratory investigations 24%.

## **Mathematics**

### **Mathematics Higher IB HL (11)**

Students focus on basic algebraic concepts as sequences and series, logarithms, complex numbers, mathematical induction and matrices. They explore different functions and apply functional methods to a variety of mathematical situations. Students examine the circular functions and are introduced to some important trigonometric identities. They get familiar with the manipulation and presentation of statistical data and the laws of probability. Students are encouraged to apply their mathematical knowledge to solve problems set in a variety of meaningful contexts. They develop insight into mathematical form and structure and develop the skills needed to continue their mathematical growth in other learning environments. Assessments comprise periodic class tests. Final assessment involves two internal assessments (20%), two written exam papers one with and one without the use of a GDC (2x40%).

### **Mathematics Standard IB SL (11)**

Students study Algebra, functions and equations, circular functions/Trigonometry and matrices and develop the ability to read, interpret and solve a given problem using appropriate mathematical terms, organize and present information and data in tabular, graphical and/or diagrammatic forms, know and use appropriate notation and terminology, formulate a mathematical argument and communicate it clearly, select and use appropriate mathematical strategies and techniques, demonstrate an understanding of both the significance and the reasonableness of results, recognize patterns and structures in a variety of situations, and make generalizations, recognize and demonstrate an understanding of the practical applications of mathematics, use appropriate technological devices as mathematical tools, and appropriately use mathematical modelling. They are assessed using previous IB exam questions along with the internally assessed component, the portfolio, which offers students a framework for developing independence in their mathematical learning by engaging in mathematical investigation and mathematical modelling.

### **Mathematics Studies IB SL (11)**

In this course, students focus on a wide variety of mathematical concepts and their applications. Over the course of the year, students will examine number sets, measurement, statistics, linear and quadratic algebra, geometry, and trigonometry. The skills that are further developed in this course include: mathematical knowledge, problem solving, and the ability to communicate effectively. Students will be periodically assessed through test and projects. Final

assessment involves two final exam papers worth 40% each, and an independent project worth 20%.

## **Technology**

### **Computer Science IB HL (11)**

Computer Science students study how computers operate and how they can be used to solve problems. The course focuses on software development, fundamentals of computer systems, the relationship between computing systems and society, computer mathematics and logic, advanced data structures and algorithms, further system fundamentals and file organization. Students will develop programming skills using the Java programming language. At the completion of each topic, students are assessed through topic tests and programming assignments. Students will also undertake formal examinations at the end of each semester.

### **Computer Science IB SL (11)**

Computer Science students study how computers operate and how they can be used to solve problems. The course focuses on software development, fundamentals of computer systems and the relationship between computing systems and society. Students will develop programming skills using the Java programming language. At the completion of each topic, students are assessed through topic tests and programming assignments. Students will also undertake formal examinations at the end of each semester.

### **Design Technology IB HL (11)**

Students follow a model of learning that includes knowledge, skills and design principles in problem solving contexts. They learn about the design process, product design, green design, product innovation, materials, product development and how to apply their knowledge to a range of situations. At the completion of each topic, students are assessed through topic tests. Internal assessment is through the IB Design Cycle criteria of Planning, Research, and Development. Students sit a formal examination at the end of each semester and external examinations at course completion. The Higher level course has more assessment criteria.

### **Design Technology SL (11)**

Students follow a model of learning that includes knowledge, skills and design principles in problem solving contexts. They learn about the design process, product design, green design, product innovation, materials, product development and how to apply their knowledge to a range of situations. At the completion of each topic, students are assessed through topic tests. Internal assessment is through the IB Design Cycle criteria of Planning, Research, and Development. Students sit a formal examination at the end of each semester and external examinations at course completion. The Higher level course has more assessment criteria.

## The Arts

### **Visual Arts IB HL (11)**

Students concentrate on studio work supported by the investigation workbook. The time allocation for Higher Level is 240 hours over the two year. Because of the nature of the subject quality work can be produced higher levels. Higher level students have the opportunity to produce more work of greater depth so the assessment criteria are differentiated according to option and level although the aims and objectives are the same. Students engage in practical exploration and artistic production and in independent contextual, visual and critical investigations that often connects to Theory of Knowledge and other subject areas. It promotes respect for cultural and aesthetic differences, creative thinking and problem solving.

### **Visual Arts IB SL (11)**

Students concentrate on studio work supported by the investigation workbook. The time allocation for Standard Level is 150 hours over the two year course. Because of the nature of the subject quality work can be produced at standard level. The assessment criteria are differentiated according to option and level although the aims and objectives are the same. Students engage in practical exploration and artistic production and in independent contextual, visual and critical investigations that often connects to Theory of Knowledge and other subject areas. It promotes respect for cultural and aesthetic differences, creative thinking and problem solving.

### **Music IB SL (11)**

Students should have a background in musical performance. HL is designed for the specialist music student with a background in musical performance and composition, who may pursue music at university or conservatoire level. The syllabus includes musical perception and analysis, the study of a prescribed work given by the IBO, and the study of musical genres, form, structure and styles from around the world. Students will also learn different ways to carry out a musical investigation to prepare them to achieve their own independent research. During the course, time will be dedicated to developing performance and composition skills.

## **Grade 12 Handbook of Studies (IB Diploma)**

### **General Introduction**

In Grade 12, students complete the second year of their International Baccalaureate Diploma. All courses are graded on a 1 to 7 scale, with 7 being the highest awarded. To gain a full Diploma students must complete one subject from each of the six groups, with an average of 4 points per subject and no subject must score below 3. Students must complete at least three subjects at a Higher Level (HL), scoring at least 4 in each. The other three subjects can be Standard (SL).

In addition, students must pass the Theory of Knowledge course and complete an Extended Essay to a satisfactory standard. They must also complete 150 hours of Creativity, Action and Service (CAS) over the two years of the course.

## **English**

### **English A1 IB HL (12)**

Students study a variety of texts which covers poetry, drama, fiction, and non-fiction prose. Readings include titles such as Shakespeare's *Hamlet*, Sophocles' *Oedipus Tyrannus*, the poetry of John Keats, Hardy's *Tess of the d'Urbervilles*, Woolf's *To the Lighthouse*, and Tolstoy's *Anna Karenina*. Assessment tasks include oral presentations and commentaries; written commentaries; comparison-contrast essays; and essay examinations. Higher Level students write two World Literature essays (1500 words each) and study 15 texts.

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### **English A2 IB HL (12)**

Students complete two literary topics *Children in Wartime* and *Isolation* by studying *The Kite Runner* and *Of Mice and Men*. They study newspapers and advertising as part of the Cultural topic, Media and Culture. They practice speaking and writing skills which are then examined. Students understand and use language appropriately in a range of contexts and for a variety of purposes. They develop an awareness and appreciation of the different perspectives of people from different cultures and of the relationship between languages and cultures. The programme allows them to develop their creativity and intellectual stimulation, providing them with a basis for further study and leisure activities. Assessments include literary essays, oral and comparative commentaries and individual written tasks. Assessments cover both literary and cultural topics and both group and individual assignments.

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### **English B HL (12)**

In the second year of English B Higher Level students continue to develop their listening, speaking, reading, writing and viewing skills so that they are able to communicate effectively in a range of situations. They participate in a wide variety of activities involving group and individual oral tasks, grammar, reading comprehension and writing for different purposes and audiences. They study novels, short stories and non-fiction texts with the aim of stimulating their interest in, and broadening their understanding of, different English-speaking cultures. They also study film, including documentaries. Oral assessment comprises a number of interactive speaking tasks and an individual oral which are moderated externally. Final written assessment takes the form of two examination papers: Text Handling and Written Production.

## **World Languages**

### **Chinese A1 IB HL (12) and Chinese A1 IB SL**

十二年级中文 A1 普通课程内容包括四部中外文学作品和一些补充文本，以及针对最后考试的技巧指导和练习。题材涉及散文、诗歌和小说。具体篇目有：《老人与海》、《家》、《白居易诗歌》、《柳宗元散文》等。主要知识点包括：小说作品的人物形象分析，作品主题意蕴的发掘，情节结构的设置，社会环境与自然环境描写以及各种艺术手法的综合运用；古典抒情性作品的思想情感领悟，结构线索，语言风格以及诗歌散文中常用的艺术技巧等。课程主要培养学生对学过或没学过的叙事性作品以及抒情性作品的独立鉴赏分析能力，能够连贯、有逻辑性的进行学术性写作和口头表达的能力以及能够对出自不同年代或不同文化的文学作品做比较鉴赏的能力。通过大量文学观念的讲授拓展学生的文学文化意识。同时运用小组讨论、论文写作以及口头评论等日常作业形式引导学生探究作品，掌握文学欣赏的技巧，提高感悟能力。评估形式主要包括定期论文写作、口头表达以及正式考试。中文 A1 高级课程学生会在此基础上增加学习两部作品《聊斋志异》和《浮躁》。

### **Chinese A2 IB HL (12)**

十二年级 Chinese A2 的学习重点包括文学和文化两方面。在文学方面，High Level 学生在十一年级学习的小说、戏剧和诗歌的基础上，进一步补充学习散文、现代散文诗等不同体

裁的名家作品，更深一步地了解中国文学的特点。在文化方面，将扩展对“媒体与文化”这一知识板块的学习，加强对“广告”、“报刊”、“广播电视”和“因特网”的理解与分析；同时也将“全球问题”板块中的“环境”、“健康问题”和“贫穷”作为重点主题研究。通过对这些知识内容的学习和探讨，要求学生在阅读的基础上，能够进行相关的比较和评述，清晰阐明自己的观点，训练写作，进行创作。

### **Chinese A2 IB SL (12)**

十二年级 Chinese A2 的学习重点包括文学和文化两方面。在文学方面，Standard Level 学生在十一年级学习的小说、戏剧和诗歌的基础上，进一步补充学习散文、现代散文诗等不同体裁的名家作品，更深一步地了解中国文学的特点。在文化方面，将扩展对“媒体与文化”这一知识板块的学习，加强对“广告”、“报刊”、“广播电视”和“因特网”的理解与分析；同时也将“全球问题”板块中的“环境”、“健康问题”和“贫穷”作为重点主题研究。通过对这些知识内容的学习和探讨，要求学生在阅读的基础上，能够进行相关的比较和评述，清晰阐明自己的观点，训练写作，进行创作。

### **Chinese B IB HL (12)**

Students develop basic reading, writing, and speaking skills. They learn about Holidays and Celebrations, Entertainment and current affairs, youth and the future world. In each unit, students memorize and practice vocabulary and grammar concepts related to the unit theme. Within these units, students explore the culture of Chinese-speaking countries and focus on key language skills: reading, writing, listening, speaking, viewing, and presenting. The assessments will involve oral test, text handling and written production. Students focus on the skills related to final DP exam paper. In addition, in the first semester, students focus on oral skills for the purpose of internal assessment. Higher Level students learn more in depth vocabulary. They also focus on improving their skills to analyze and enjoy some simple literature.

### **Chinese B IB SL (12)**

Students develop basic reading, writing, and speaking skills. They learn about Holidays and Celebrations, Entertainment and current affairs, youth and the future world. In each unit, students memorize and practice vocabulary and grammar concepts related to the unit theme. Within these units, students explore the culture of Chinese-speaking countries and focus on key language skills: reading, writing, listening, speaking, viewing, and presenting. The assessments will involve oral test, text handling and written production. Students focus on the skills related to final DP exam paper. In addition, in the first semester, students focus on oral skills for the purpose of internal assessment.

### **Chinese ai IB SL (12)**

Students learn about leisure activities, travel and weather, environment and emergencies. Their studies focus on improving speaking, reading and writing. At the end of the first semester we finish one formal group oral test and one moderation single oral test. In the second semester, students focus on practicing oral language. Once they have finished their oral exams they will review all topics and prepare for their final exams. Students are assessed through dialogue between student and teacher, group discussions, short play, posters, brochures, text handling

and written productions.

### **German A1 IB HL (12)**

Die Schüler beschäftigen sich mit formalen und inhaltlichen Merkmalen der literarischen Werke „Abschied von den Eltern“, „Unterm Rad“, „Vater eines Mörders“ und „Das Versprechen“. Sie ordnen sie epochal und gattungsspezifisch ein und stellen sie thematisch /inhaltlich in Zusammenhang und untersuchen die verschiedenen Darstellungsformen. Ferner findet eine zusammenfassende Vorbereitung in Einklang mit den Anforderungen des IB statt.

### **German ai IB SL (12)**

Students enhance their reading, writing, and speaking skills. In the first unit, students talk and write about hobbies, leisure activities and travel. Next, they talk about shopping, clothes and stores in the community. In the third unit, students discuss education and work. In the final unit, they talk about rooms and items in the house as well as household chores. In each unit, students memorize and practice vocabulary and grammar concepts related to the unit theme. Within these units, students explore the culture of German-speaking countries and focus on key language skills: reading, writing, listening, speaking, viewing, and presenting. All units include assessments in each of these skill areas, with a focus on reading, writing, and speaking.

### **Japanese A1 IB HL (12)**

Students study one World and four Japanese literary works as they focus on developing analytical, comprehension, organization, and presentation skills. Students study how beauty and vice are realized in literary works, while focusing on critical reading skills needed to analyze literature. In preparation for the IB Internal Assessments, students are assessed on oral and written literary commentary skills. This unit includes final presentation of the Oral Commentary portion of the Internal Assessment. Next, students explore the influences society has on women. Students focus on analytical and organizational skills and are assessed through comparative and creative essays. The year concludes with the review and preparation for the final IB examination.

### **Japanese ai IB SL (12)**

Students further develop communication skills. They focus on the grammar and vocabulary related to the unit theme while exploring Japanese culture. Students discuss holidays and celebrations and talk and write about sports and hobbies. Next, students learn to give directions and talk about houses and common items. They talk about moving and learn to offer suggestions and help to others. They will express disappointment and are able to give instructions and advice to others. The year concludes with an in-depth review and preparation for final assessments. In the second semester of this course, students complete the Internal Oral assessments and the Final Exam.

### **Korean A IB HL (12)**

Students develop an understanding of the techniques involved in literary criticism and a personal appreciation of literature. They explore a range of literary works from different periods, genres, styles and contexts. In the first unit, Comparative Analysis, which is the focus of World Literature Assignments and Paper 2, students continue to focus on the structure and

presentation of a comparative essay. In the second unit, Analytical Presentations, students focus on skills required for the Individual Oral presentation. Students learn how to choose a topic and presentation structure for the Individual Oral Presentation. In the final unit, students review all works studied and prepare for the IB examination.

### **Spanish B IB HL (12)**

Students develop advanced communication skills. They talk and write about tourism and its impact in local communities. Next they discuss the family and inter-personal relationships. Students talk and write about study and work as well as global development and the environment. They discuss technology and science. Finally, they prepare for the IB Diploma examination. In each unit, students learn and practice vocabulary and grammar concepts related to the unit theme. Within these units, students explore the culture of Spanish-speaking countries and focus on key language skills required for the IB Examination, namely reading, writing, and speaking. All units include assessments in each of these skill areas.

### **Spanish ai IB SL (12)**

Students learn to communicate in everyday situations. They explore school-related activities and they discuss shopping and special events. They then learn about activities and locations in a city. Next they discuss childhood and holiday celebrations. They will then explore current events and emergency situations as well as popular entertainment. The final unit is an in-depth review and preparation for the final exam. In each unit, students memorize and practice vocabulary and grammar concepts related to the unit theme. Within these units, students explore the culture of Spanish-speaking countries and focus on key language skills required for the final examination: reading, writing, and speaking. All units include assessments in each of these skill areas.

## **Humanities**

### **Business IB HL (12)**

This course is designed to give students an international perspective of business and to promote their appreciation of cultural diversity through the study of a number of topics which are spread across 6 modules. Students study 3 modules: Operations Management, Human Resources and Strategy. In these modules students learn about operational decision-making, quality assurance, customer care and the way people influence and are influenced by organizations in order to achieve organizational objectives. Students are assessed through a combination of case studies, research and presentation tasks, essay questions group work, end of semester examinations and final examination from the IBO which consist of one research paper – the Internal Assessment and two external assessment papers.

### **Business IB SL (12)**

This course is designed to give students an international perspective of business and to promote their appreciation of cultural diversity through the study of a number of topics. Students study 2 modules: Operations Management and Human Resources. In these modules they learn about

operational decision-making , quality assurance, customer care and the way people influence and are influenced by organizations in order to achieve organizational objectives. Students are assessed through a combination of case studies, research and presentation tasks, essay questions group work, end of semester examinations and final examination from the IBO which consist of one written commentary – the Internal Assessment and two external assessment papers.

### **Economics IB HL (12)**

In the first half of the semester, students focus on completing the internal assessment (research project) aspect of the course. This project constitutes 20% of the final IB mark at the Higher Level. At the end of semester one students should have completed the syllabus for this course. For the rest of the semester, students focus on revision and exam practice for the IB examinations

### **Economics IB SL (12)**

Students focus on completing the internal assessment (written commentary) aspect of the course. This project constitutes 25% of the final IB mark. At the end of semester one, students will have completed the syllabus for this course. For the rest of the semester, they will focus on revision and exam practice for the IB examinations.

### **Geography IB HL (12)**

Students complete their study of the core topics with a unit on Sustainable Development and Resource Management. They then complete three optional topics from the following: Contemporary Issues in Geographical Regions, Ecosystems and Human Activity, Arid Environments (or Drainage Basins) and their Management, Settlements, Productive Activities – Aspects of Change, and Globalization. Students will continue to develop their investigative and analytical skills by designing and carrying out fieldwork activities. Students will prepare for their exam and refine skills which will be needed when sitting the final examination. The grade for this course is determined as follows: Paper 1 on the Core (25%), Paper 2 on the Options (50%) and an Internal Assessment project (25%).

### **Geography IB SL (12)**

Students complete their study of the core topics with a unit on Sustainable Development and Resource Management. They then complete two optional topics from the following: Contemporary Issues in Geographical Regions, Settlements, Productive Activities – Aspects of Change, and Globalization. During this year they will continue to develop their investigative and analytical skills by designing and carrying out fieldwork activities. Students will prepare for their exam and refine skills which will be needed when sitting the final examination. The grade for this course is determined as follows: Paper 1 on the Core (40%), Paper 2 on the Options (40%) and an Internal Assessment project (20%).

### **History IB HL (12)**

In preparation for paper 2, all students will continue to study various aspects of Totalitarianism. The course will focus on the reasons for Hitler and Mao's rise to power, the methods they used

to stay in power, including the effects they had on their respective countries and abroad. In preparation for paper 3, students will continue to study the Civil Rights movement in the United States. As well, students will study the causes, course and consequences of the Cold War in preparation for both Paper 2 and Paper 3. Skills involved are researching and presenting information, writing in-depth comparative and analytical essays, learning how to interpret the conflicting views of various historians and how to add these views to the analytical aspects of their essays. Students will also prepare for their May exams with past papers and timed essay practice.

### **History IB SL (12)**

In preparation for Paper 2, all students will continue to study various aspects of Totalitarianism. The course will focus on the reasons for Hitler and Mao's rise to power, the methods they used to stay in power, including the effects they had on their respective countries and abroad. Students will also study the causes, course and consequences of the Cold War. The main skills involved will be developing essay outlines, making decisions to rank the relative importance of facts, and learning how to interpret the conflicting views of various historians and how to add these views to the analytical aspects of their essays. Students will also prepare for their May exams with past papers and timed essay practice.

## **Science**

### **Biology IB HL (12)**

Students study the topics Statistical Analysis, Cells, The Chemistry of Life, Genetics, Ecology and Evolution, Human Health and Physiology, Nucleic Acids and Proteins, Cell Respiration and Photosynthesis, and Plant Science. Additionally students study two of five optional units. The options are Evolution, Neurobiology and Behaviour, Microbes and Biotechnology, Ecology and Conservation and Further Human Physiology. Students develop the skills to analyse and communicate scientific information. Students develop laboratory skills by designing and carrying out experiments. There are two components to the course grade. The I.B. Examinations (76%) and the internally assessed, externally moderated Internal Assessment of laboratory reports (24%).

### **Biology IB SL (12)**

Students study the topics Statistical Analysis, Cells, The Chemistry of Life, Genetics, Ecology and Evolution, and Human Health and Physiology. Additionally students study two of seven optional units. The options are Human Nutrition and Health, Physiology of Exercise, Cells and Energy, Evolution, Neurobiology and Behaviour, and Microbes and Biotechnology. Students develop the skills to analyse and communicate scientific information. Students develop laboratory skills by designing and carrying out experiments. There are two components to the course grade. The I.B. public Examinations contribute 76% of the grade. The remaining 24% is for the internally assessed, externally moderated Internal Assessment of laboratory reports.

**Chemistry IB HL (12)**

Students complete the core topics with a unit on Organic Chemistry. They then complete two optional topics from the following: an introduction to Human Biochemistry, Chemistry in Industry and Technology, Medicines and Drugs, Environmental Chemistry, Food Chemistry, or additional study topics of Organic Chemistry or Analytical Chemistry. During this year they will develop their laboratory skills by designing and carrying out experiments and by processing the associated results. A considerable part of the year is devoted to examination preparation and the refinement of the skills which will be needed when sitting the final examination. There are two components to the course grade. The I.B. public Examinations contribute 76% of the grade. The remaining 24% is for the internally assessed, externally moderated Internal Assessment of laboratory reports.

**Chemistry IB SL (12)**

Students first study the properties of Acids and Bases and how they are used industrially. Students then explore the world of Electrochemistry in learning what it takes to create different types of chemical and electrical cells. Students then work on understanding Organic Chemistry, in studying how plastics, oils, and alcohols are used, created, and chemically reacted to make everyday products. Options that students may choose for further study include: an introduction to Human Biochemistry, Chemistry in Industry and Technology, Medicines and Drugs, Environmental Chemistry, Food Chemistry, or additional study topics of Organic Chemistry or Analytical Chemistry.

**Physics IB HL (12)**

Students are completing topics on Fields and Forces, Atomic Physics and Energy, Power and Climate Change as well as the option on Astrophysics. They are developing their laboratory skills by designing and carrying out experiments and by processing the associated results. A considerable part of the year is devoted to examination preparation and the refinement of the skills which will be needed when sitting the final examination. There are two components to the course grade. The I.B. public Examinations contribute 76% of the grade. The remaining 24% is for the internally assessed, externally moderated Internal Assessment of laboratory reports.

**Physics IB SL (12)**

Students are completing topics on Fields and Forces, Atomic Physics and Energy, Power and Climate Change as well as the two options: Astrophysics and Quantum and Nuclear Physics. They are developing their laboratory skills by designing and carrying out experiments and by processing the associated results. A considerable part of the year is devoted to examination preparation and the refinement of the skills which will be needed when sitting the final examination. There are two components to the course grade. The I.B. public Examinations contribute 76% of the grade. The remaining 24% is for the internally assessed, externally moderated Internal Assessment of laboratory reports.

## Mathematics

### **Mathematics Higher IB HL (12)**

Students focus on the basic concepts and techniques of differential and integral calculus and their applications. They explore vectors in two and three dimensions and examine complex numbers. Students demonstrate a good level of statistical understanding and interpret the given results. Students are encouraged to apply their mathematical knowledge to solve problems set in a variety of meaningful contexts. They develop insight into mathematical form and structure and develop the skills needed to continue their mathematical growth in other learning environments. Assessments comprise periodic class tests. Final assessment involves two internal assessments (20%), two written exam papers on the core one with and one without the use of a GDC (2x30%) and a written assessment on the option Statistics (20%).

### **Mathematics Standard SL (12)**

Students study vectors, statistics, probability and Calculus. Students continue to develop the ability to read, interpret and solve a given problem using appropriate mathematical terms, organize and present information and data in tabular, graphical and/or diagrammatic forms, know and use appropriate notation and terminology, formulate a mathematical argument and communicate it clearly, select and use appropriate mathematical strategies and techniques, demonstrate an understanding of both the significance and the reasonableness of results, recognize patterns and structures in a variety of situations, and make generalizations, recognize and demonstrate an understanding of the practical applications of mathematics, use appropriate technological devices as mathematical tools, and appropriately use mathematical modelling. They are formatively assessed with in-class tests and quizzes made up of previous IB exam questions. Summative assessments include IB public examinations and at least one piece of work for submission as part of the internally assessed component, the portfolio, which offers students a framework for developing independence in their mathematical learning by engaging in mathematical investigation and mathematical modelling. The portfolio also allows students to work without the time constraints of a written examination and to develop the skills they need for communicating mathematical ideas.

### **Mathematics Studies IB SL (12)**

In this course, students focus on a wide variety of mathematical concepts and their applications. Throughout the year, students will examine sequences and series, probability, logic, a variety of functions, and an introduction to calculus. The skills that are further developed in this course include: mathematical knowledge, problem solving, and the ability to communicate effectively. Students will be periodically assessed through test and projects. Final assessment involves two final exam papers worth 40% each, and an independent project worth 20%.

## **Technology**

### **Design Technology HL (12)**

Students follow a model of learning that includes knowledge, skills and design principles in problem solving contexts. In addition to topics covered in Grade 11, students will learn how to evaluate products and study Food Science and Technology. They will apply their knowledge when undertaking a major internal assessment in the form of a Design Project. This will be based upon the topics studied throughout the course. Internal assessment is through the IB Design Cycle criteria of Planning, Research, and Development. Students sit a formal examination at the end of each semester and external examinations at course completion. Higher Level students have extension tasks.

### **Design Technology SL (12)**

Students follow a model of learning that includes knowledge, skills and design principles in problem solving contexts. In addition to topics covered in Grade 11, students will learn how to evaluate products and study Food Science and Technology. They will apply their knowledge when undertaking a major internal assessment in the form of a Design Project. This will be based upon the topics studied throughout the course. Internal assessment is through the IB Design Cycle criteria of Planning, Research, and Development. Students sit a formal examination at the end of each semester and external examinations at course completion.

## **The Arts**

### **Visual Arts IB HL (12)**

Students continue from Grade 11 and develop their work. Emphasis is placed on an integrated relationship between studio work and investigation work. Students explore art, craft and design traditions from past and present cultures and in local, national and international contexts. They produce investigation and art works that show their understanding of conceptual content, technical skill and critical awareness. The examination evaluates the process and products of artistic investigation and development. Students prepare a record booklet consisting of a 300 word statement, photographs of 8 to 18 studio works and copies of 15 to 40 selected pages from the investigation workbook depending on their option and level. The examination interview lasts for 20 to 40 minutes and encourages the student to talk about their theme and its development. Higher Level students are expected to produce work of greater complexity.

### **Visual Arts IB SL (12)**

Students continue to develop their work. Emphasis is placed on an integrated relationship between studio work and investigation work. Students explore art, craft and design traditions from past and present cultures and in local, national and international contexts. They produce investigation and art works that show their understanding of conceptual content, technical skill and critical awareness. The examination evaluates the process and products of artistic investigation and development. Students prepare a record booklet consisting of a 300 word statement, photographs of 8 to 18 studio works and copies of 15 to 40 selected pages from the investigation workbook depending on their option and level. The examination interview lasts for 20 to 40 minutes and encourages the student to talk about their theme and its development.

## **Grade 11 and 12 Handbook of Studies (High School Diploma)**

### **General Introduction**

The High School Diploma allows students to take one year courses at High School (HS), Honors (Hons) or Advanced Placement (AP) level. Some courses require a pre-requisite, for example Year 2 (Y2) language courses require completion of the Year 1 (Y1) component; Calculus AP follows Pre-Calculus; and Chemistry AP follows Chemistry (Hons).

## **English**

### **English A (Hons)**

The course aims to develop a variety of linguistic skills through a wide range of texts, to promote an appreciation of the wealth and subtleties of the language and to facilitate the clear expression of ideas. This course encourages appreciation of literature and knowledge of the culture of students' own society and that of other societies. It facilitates the clear expression of argument and assists in the understanding of both oral and written discourse. This is both a literature-based and writing-based course; the mechanics of writing are taught through the context of the literature and the student's writing. Assessment is ongoing. Final assessment involves: 2 Written tasks (40%), 2 Exam papers (30%), Oral presentations (15%), In-class assignments (15%).

### **English B Y1 (HS)**

Students prepare in all the four language skills according to the IELTS, SATs & TOEFL requirements with an aim to taking those exams in the second year of the course. They use "Objective IELTS Intermediate" as a basic course book as this covers the processing and production of academic English texts. They also read a range of short newspaper articles. Listen to news broadcasts from the BBC.CNN and other English language broadcasts. They watch films which show English speaking cultures such as "The curious case of Benjamin Button" to help them understand the cultural context of English speaking countries.

### **English B Y2 (HS)**

In speaking, students practice skills in individual interviews, news reporting and discussions of current affairs issues. In reading, students read a range of journalistic texts. Writing skills include the production of academic essays as required in the IELTS, SATS & TOEFL, formal/informal letters, personal response to films & novels. The students take practice IELTS, SATs and TOEFL tests with an aim to taking the actual exams in their second year as some of them will be applying for admission to universities in English speaking countries.

## **World Languages**

### **Chinese A Y1 (HS)**

Students study the Chinese characters' strokes and radicals, individuals, foods, School life, leisure life, travel, visit friends, shopping, house, disease and cure, health and emergency and the environment. Students study cultures and customs including famous Chinese fairy tales, Chinese festivals, Chinese Zodiac, Chinese calligraphy and painting. Students practice the skills

of communication with Chinese in basic topics. They develop a range of vocabulary and sentences structures, make a personal study plan, and write simple articles in Chinese. Assessment includes dialogues between students and the teacher, group discussions, short plays and text handling.

### **Chinese A Y2 (HS)**

Students study Chinese characters' strokes and radicals, Chinese literature, vocabulary and grammar. Students will enlarge their range of vocabulary and sentences' structures, make personal study plans and write simple articles in Chinese. They will work on presentations and improve their vocabulary and grammar structures. The course focuses on oral presentations and daily communications. The assessment is based on communication skills, group discussions, a short play and text comprehension.

### **Chinese Foundation Y1 (HS)**

Students study Chinese culture and communication skills. Students will learn Chinese characters, greetings, family members, personal introduction, numbers and dates, countries and languages, occupations and work places, modes of transport and time. In the second year, students will study colors and clothing, weather and holidays, hobbies, daily routine, school subjects, school facilities and making telephone calls. Regular assignments ensure students explore each topic using a combination of reading comprehension, listening practice and daily communications. They will be assessed on reading comprehension, writing production, oral presentation and interactive oral activities.

### **Chinese Foundation Y2 (HS)**

Students acquire language used for everyday social interaction. In the second year, students study the topics of colors and clothing, weather and holidays, hobbies, daily routine, school subjects, school facilities and making telephone calls. Meanwhile they are taught about some Chinese cultures and customs. Students develop a variety of linguistic skills and a basic awareness of the cultures using the language. Regular assignments ensure students explore each topic using a combination of reading comprehension, listening practice and daily communications. The assessment comprises reading comprehension, writing production, oral presentation and interactive oral activities.

### **German Foundation (HS)**

Students further develop communication skills and focus on the grammar and vocabulary related to the unit theme while exploring German culture. Students talk and write about hobbies, leisure activities, travel, shopping, clothes and stores, education and work, rooms and items in the house as well as household chores. Students explore the culture of German-speaking countries and focus on key language skills: reading, writing, listening, speaking, viewing, and presenting. All units include assessments in each of these skill areas, with a focus on reading, writing, and speaking.

### **Japanese Foundation (HS)**

In this beginners' course, students study Japanese characters and develop key linguistic skills by focusing on daily conversation and practicing vocabulary and grammar concepts. Students learn

to exchange personal information in basic conversations, practice dialogues for inviting and visiting people, learn expressions used for shopping, discuss trips and food, discuss family relationships and learn to give directions and practice expressions used at a clinic or bank. Students focus on the grammar and vocabulary while exploring Japanese culture. Students are assessed through reading, written and oral tasks.

### **Korean A Y1 (HS)**

Students develop an understanding of the techniques involved in literary criticism and a personal appreciation of literature. They explore a range of literary works from different periods, genres, styles and contexts. In the first unit, Paper 1 and Commentary, students learn how to analyze literary features, such as style, structural and linguistic elements, in prose and poetry. Students learn how to write and present a literary analysis. The focus of this unit is preparation for the literary commentary. In the second unit, Comparative Analysis, students prepare for the World Literature assignments and Paper 1 of the IB Exam. In this unit, students learn essential strategies for comparing literary works. Students focus on the structure and presentation of essays.

### **Korean A Y2 (HS)**

Students develop an understanding of the techniques involved in literary criticism and are encouraged to pursue literature for personal enjoyment. They explore a range of literary works from different periods, genres, styles and contexts. In the first unit, Oral Commentary, they practice and develop communication skills involved in writing and speaking in a variety of styles and situations. In the second unit, Writing Analysis of Poetry and Prose, they focus on essential writing strategies and commentary. In the final unit, students review all works and review for the final examination. All units include assessments in writing and speaking, with a focus on analytical essays and the organization of oral presentations.

### **Spanish Foundation (HS)**

Students learn to communicate at a basic level in Spanish. They learn basic conversation skills, discuss their favorite activities and friends, learn about school schedules and classrooms, discuss food, meals, and healthy living, discuss places in the community and leisure activities, talk and write about family celebrations and holidays, discuss household items and chores. Students memorize and practice vocabulary and grammar concepts. Students also explore the culture of Spanish-speaking countries and focusing on key language skills namely reading, writing, and speaking.

## **Humanities**

### **American History (HS)**

United States History is a one year course following the structure, and most of the expectations, of an Advanced Placement course. Students begin with Pre-Columbian Native American societies and end at the present day. Students develop factual knowledge of United States history and learn to assess historical materials, including primary source documents, for their

reliability and relevance, and to weigh the evidence and interpretations presented in historical scholarship. Students must demonstrate knowledge and skills through writing and oral presentation and use and develop of analytical and writing skills.

### **Asian Studies (HS)**

Students study the histories of various Asian countries from their origins to the present day. They use multiple approaches to historical analysis and assessment, addressing various themes such as geography, demographics, technological advancements, and conflict and resolution within and between nations. Students develop the ability to think and write critically, use comparative analysis, and analyze and interpret primary and secondary source documents. Students will be assessed on the following tasks; written assignments, oral presentations, formal examinations, research projects, and coursework activities.

### **Business (HS)**

Students study practical aspects of business and management in contexts which students will encounter in life. Students study business organizations, the management of people, operations, processes, resources and organization, marketing of goods and services, business and personal financial management and the use of information systems to support business efforts. They are assessed through a combination of case studies, research and presentation tasks, essay questions group work, one business development project and end of semester examinations.

### **Leisure and Tourism (HS)**

Students examine the unique characteristics of the travel and tourism industry. They develop an understanding of how natural environments, economies, cultures, and other aspects of world regions interact. Regular assignments ensure the students explore and reflect on travel and tourism using the skills of cooperative learning, conferencing, discussion/ debate, inquiry-based research and oral presentation. Assessment comprises periodic class essays, presentations and formal examinations. Final assessment involves term work (50%), an independent study project (30%) and one written exam paper (20%).

## **Science**

### **Biology (Hons)**

Students study Statistical Analysis, Cells, The Chemistry of Life, Genetics, Ecology and Evolution and Human Health and Physiology. Students develop laboratory skills by designing and carrying out experiments. The grade for this course is determined by combining results from examinations, tests and laboratory work. The Semester 1 Exam contributes 24% of the final grade. The Semester 2 Examination also contributes 24%. Class tests contribute 28% of the final grade and the assessment of laboratory reports contributes 24%.

### **Chemistry (Hons)**

Students focus on a range of skills applicable to industrial processes. Students begin by learning about the structure of the atom as well as patterning within the Periodic Table. Students learn about quantitative chemistry and look at how changing the factors of temperature, pressure

and volume within an industrial process have an effect on the desired yield of a product. Students study examples of chemicals that are used in industry and study how they are made and named. Finally, students study the properties of gases, and how manipulating various factors can affect their involvement within chemical reactions.

### **Chemistry AP**

This course aims to provide an academic chemistry course similar in content and standard to that of a first-year college course. A significant characteristic of this course is the amount of time devoted to the quantitative nature of chemistry. This is true of lessons, assignments, tests and laboratory work. This course emphasizes chemical calculations and the mathematical formulation of principles. The following topics are taught: Atomic structure, Periodicity, Bonding, Stoichiometry, Energetics, Kinetics, Equilibrium, Acids and bases, Oxidation and reduction, Organic chemistry. The course includes a comprehensive laboratory program with experiments relating to all sections of the course.

### **Physics (Hons)**

Students study core and advanced topics on Mechanics and Thermal Physics, Oscillations and Waves and Electric Currents. Students develop laboratory skills by designing and carrying out experiments. There are two components to the course grade: The I.B. Examinations (76%) and the internally assessed, externally moderated internal assessment of laboratory reports (24%).

### **Biological Science (HS)**

Students study the topics Biology and The Real World, The Scientific Method, Plant Science, Human Health and Physiology, Microbiology and Disease, Enzymes and DNA Technology. Students develop laboratory skills by designing and carrying out experiments. The assessment scheme has four areas. These are: Communication (lab reports, presentations and essay) - 22%; Knowledge and Understanding (exams) - 22%; Practical Work (laboratory reports - 32%; Attitudes (book work, homework, class pop tests, effort) - 20%.

## **Mathematics**

### **Calculus AP**

Students study properties of functions, limits, differential calculus, integral calculus, sequences, series, and calculus involving parametric, polar, vector function, and use of symbolic differentiation and integration utilities. Students develop the ability to read, interpret and solve a given problem using appropriate mathematical terms, organize and present information and data in tabular, graphical and/or diagrammatic forms, know and use appropriate notation and terminology, formulate a mathematical argument and communicate it clearly, select and use appropriate mathematical strategies and techniques, demonstrate an understanding of both the significance and the reasonableness of results, recognize patterns and structures in a variety of situations, and make generalizations, recognize and demonstrate an understanding of the practical applications of mathematics, use appropriate technological devices as mathematical tools, and appropriately use modelling. They are assessed primarily with in-class tests and quizzes made up of previous AP exam questions take the AP exam in May.

### **Pre-Calculus (Hons)**

Students explore the notion of functions as a unifying theme in mathematics; they apply functional methods to a variety of mathematical situations. They explore trigonometry and its applications, and get familiar with some basic concepts of algebra. It is expected that extensive use will be made of a GDC in both the development and the application of these topics. Students are encouraged to apply their mathematical knowledge to solve problems set in a variety of meaningful contexts. They develop insight into mathematical form and structure and develop the skills needed to continue their mathematical growth in other learning environments. Assessments are a combination of research, presentations and periodic class tests. Final assessment involves a written exam paper.

### **Applications Y1 (HS)**

In this course, students move away from the theoretical knowledge of mathematics and into the real world applications. Students primarily focus on the mathematics of personal finance, geometry and measurement, probability and statistics. The skills that are further developed in this course include: mathematical knowledge, problem solving, and the ability to communicate effectively. Students are given the opportunity to demonstrate their knowledge through a wide variety of assessments which include tests, project work, and semester exams

### **Applications Y2 (HS)**

In this course, students focus more on real world uses of mathematics, and less on the abstract theories. Over the course of the year we will look at a variety of topics which include geometry, network optimisation, statistics, probability, and financial mathematics. Through every topic students will develop their skills in mathematical problem solving and communication with a heavy focus on the use of technology. They are assessed through a variety of different methods including tests, semester exams, and project work.

## **Technology**

### **Nutritional Science (HS)**

Students study how to blend natural ingredients and healthy eating into everyday life. They learn to research appropriate information, design recipes and dietary plans and use them to assist those with food-related health problems. In addition, they learn practical skills such as grilling, baking, poaching, purchasing, food preservation and storage. At the completion of each unit, students are assessed. Students take one written examination at the end of the first semester and work on projects throughout the year.

### **Materials Technology (HS)**

Students learn about the design process, product design, ergonomics, materials, product development and evaluation strategies and how to apply their knowledge to a range of situations. Internal assessment is based on planning, research, and development. Students take a written examination at the end of each semester and at course completion.

### **Information Technology (HS)**

Students study practical and theoretical aspects of problem solving using information technology. Students study multimedia applications, advanced word processing techniques, advanced spreadsheets, and global communication technologies including web design. They are assessed through a combination of short tasks, projects and end of semester examinations.

### **Theatre Technology (HS)**

Students study the history of theater as it relates to technical aspects of drama production and the essential players behind the scenes. They develop the ability to design and construct theatrical sets, costumes, special effects and props as well as create lighting designs and operate lighting and audio equipment. Students also develop the ability to work effectively in groups and design and maintain safe working environments. They are assessed based on required participation in school-sponsored theatrical work, designs and products of work.

## **The Arts**

### **Art (Hon)**

The IB Visual Arts in High School encourages students to develop their creative and critical abilities and enhances their knowledge, appreciation and enjoyment of visual arts. The aim of this course is for students to investigate emerging forms of visual arts in the past and present. They are encouraged to appreciate, develop and experience the local, national and international cultures throughout their investigation and studio works. They are to produce works that reflect cultural and historical awareness. The students will demonstrate technical competence and artistic and creative qualities that challenge and extend personal boundaries.

### **Ceramics (HS)**

Students learn about the history and significance of ceramics in Asia and the world. They record and analyse their research and investigate the physical and chemical properties of clay and glaze. They also learn hand building and wheel work skills and apply safe workshop practices. The preparatory work and the final product are assessed for the quality of the research and its analysis, the development of the design, the level of technique shown, its suitability for the target group and how it was influenced by peer comments, their journal describing the process and evaluation, and the effectiveness of the final outcome.

### **Music (HS)**

Students learn to understand and perceive music in relation to time, place and cultures. They develop musical vocabulary to describe and reflect their critical understanding of music. The students will also do comparative analysis of different musical genres and styles. Time will also be dedicated to learning research strategies to help the students acquire skills that they can apply in given assignments.