Brent International School Manila

Course Offerings 2018-2019

Upper School

Mission Statement of All Brent Schools

Brent Schools, in a Christian ecumenical environment in the Philippines, are committed to develop individual students as responsible global citizens and leaders in their respective communities, with a multicultural and international perspective, and equipped for entry to colleges and universities throughout the world.

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Expected School-wide Learning Results

Brent School's philosophy is summarized in the Expected School-wide Learning Results, which state that the school, in a Christian environment, prepares its students to be:

Responsible citizens who:

- Exercise leadership;
- Work effectively with others in diverse settings;
- Resolve conflicts productively and peacefully;
- Demonstrate a sense of civic awareness;
- Contribute responsibly to the community.

Critical thinkers who:

- Distinguish between facts and opinions, judgments and inferences;
- Construct and recognize the structure of arguments, and adequately support arguments;
- Define, analyze, and devise solutions for problems and issues;
- Sort, organize, classify, correlate, and analyze materials and data;
- Integrate information and see relationships;
- Evaluate information, materials and data by drawing inferences, and arriving at reasonable and informed conclusions;
- Apply understanding and knowledge to new and different problems;
- Suspend beliefs and remain open to new information, methods, values and beliefs.

Technologically literate individuals who:

- Demonstrate basic technology skills;
- Apply technology ethically and productively;
- Communicate using technology;
- Conduct research using technology;
- Use technology to enhance critical thinking.

Healthy individuals who:

- Understand and demonstrate physical, mental, and spiritual health;
- Develop life-long health and fitness goals;
- Understand substance abuse, its effects and consequences.

Tolerant individuals who:

- Respect themselves and others;
- Understand and appreciate the diversity and interdependence of all people;
- Deal effectively with conflict caused by diversity of opinions and beliefs;
- Respect the role of gender, religion, culture and ethnicity in the world.

Effective communicators who:

- Articulate thoughts clearly;
- Demonstrate an understanding of their audience;
- Take responsibility for their message;
- Demonstrate the ability to listen actively;
- Use a variety of communication skills.

Life-long learners who:

- Demonstrate intellectual curiosity;
- Are self-directed;
- Integrate and apply what they learn to improve their own lives;
- Recognize that continual learning is vital to making informed choices;
- Reflect on and evaluate their learning for the purpose of self improvement;
- Use a range of learning strategies and time management skills to enhance learning.

Welcome to High School

Graduation Requirements

Courses

Language A	4 years
Mathematics	4 years
Social Science	4 years
Science	4 years
Modern Language	3 or 4 years*
TOK	1 year (2 semesters)
PE	1 year (2 semesters)
Electives	2 or 3 years (4 semesters)*
	24 Units

*Students who are not seeking the external I.B. exams may opt to take an elective in place of the fourth year Modern Language Requirement.

To complete the High School Program, students are also required to take Religious Studies (2 semesters), Computers (2 semesters), Visual and Performing Arts (2 years), Junior Seminar (1 Semester), another year of Physical Education and complete Creativity, Action and Service (CAS) hours.

The IBO Mission Statement

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

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

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

Source: www.ibo.org

IB learner profile

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

As IB learners we strive to be:

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

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

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

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

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

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

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

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

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

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

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

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Structure of the IB Diploma Program for Grades 11 and 12

Source: www.ibo.org

The hexagon diagram above best represents the wholeness of the IB Diploma Program.

To obtain a full IB diploma, students must choose six subjects, one subject per subject grouping of the hexagon, three of which are in the higher level (240 hours over two years), three are in the standard level (150 hours over two years), submit an independent in-depth research paper for the Extended Essay that is evident of 40 hours of work, 100 hours of Theory of Knowledge, and render participation hours in Creativity, Action, and Service (CAS).

Each of the six courses is scored on a 1-7 scale, and 3 bonus points are possible through TOK and the Extended Essay. The minimum passing score is 24 with a maximum of 45 points possible.

Upper School IB Planner

	9th	10th	11th	12th
Language A English (Group 1)	English	Adv. Literature* OR Literature	Language & Literature SL/HL* Literature SL/HL*	Language & Literature SL/HL* Literature SL/HL*
Language A Other A Languages (Group 1)	Filipino Korean	Filipino Korean	Filipino, Korean Literature A SL/HL	Filipino, Korean Literature A SL/HL
Modern Language Language B OR Ab Initio - learned language (Group 2)	French Mandarin Spanish Beginner/Intermediate	French Mandarin Spanish Beginner/Intermediate	French, Mandarin, Spanish B or Ab Initio	French, Mandarin, Spanish B or Ab Initio
Social Science (Group 3)	Geography/History	Geography/History	Business SL/HL Economics SL/HL Geography SL/HL History SL/HL ITGS SL/HL Psychology SL/HL	Business SL/HL Economics SL/HL Geography SL/HL History SL/HL ITGS SL/HL Psychology SL/HL
Science (Group 4)	Biology	Adv. Chemistry*/ Adv. Physics** OR Chemistry/Physics	Biology SL/HL Chemistry SL/HL* Physics SL/HL** Computer Science SL/HL* Sports, Exercise, Science SL (only)	Biology SL/HL Chemistry SL/HL* Physics SL/HL** Computer Science SL/HL* Sports, Exercise, Science SL (only)
Mathematics (Group 5)	Adv. Geometry OR Geometry	Adv. Algebra 2* OR Algebra 2	Mathematics HL* Mathematics SL Mathematics Studies SL	Mathematics HL* Mathematics SL Mathematics Studies SL
Visual/Performing Arts, Elective (Group 6)	Foundations of Art, Visual Arts/Music, Strings, Band, Choir, Dance	Foundations of Art*, Visual Arts/Music**, Strings**, Band**, Choir**, Dance	Music SL**/HL** Theater SL/HL Visual Arts SL/HL* OR Another subject from Groups 1-4	Music SL**/HL** Theater SL/HL Visual Arts SL/HL* OR Another subject from Groups 1-4
Computer, Religious Studies, Junior Seminar, Theory Of Knowledge	Computer/Rel. Studies	Computer Programming*/Rel. Studies OR Computer/Rel. Studies	JSem (1st semester) TOK (2nd semester)	TOK
PE/Health, Study Hall	PE/Health	PE/Health	Study Hall OR Another subject from Groups 1-4 or the Arts (for additional IB course)	Study Hall OR Another subject from Groups 1-4 or the Arts (for additional IB course)
Other IB elements with no designated class time	–	–	Creativity, Action, Service (CAS) and Extended Essay (EE)	Creativity, Action, Service (CAS) and Extended Essay (EE)

**Prerequisites* for certain HL and SL courses have been highlighted. Many HL courses require Advanced level courses in grade 10. Make sure to read the prerequisites for each HL and SL course before making your selections.

Prerequisites and Guiding Questions for the IB Diploma Program

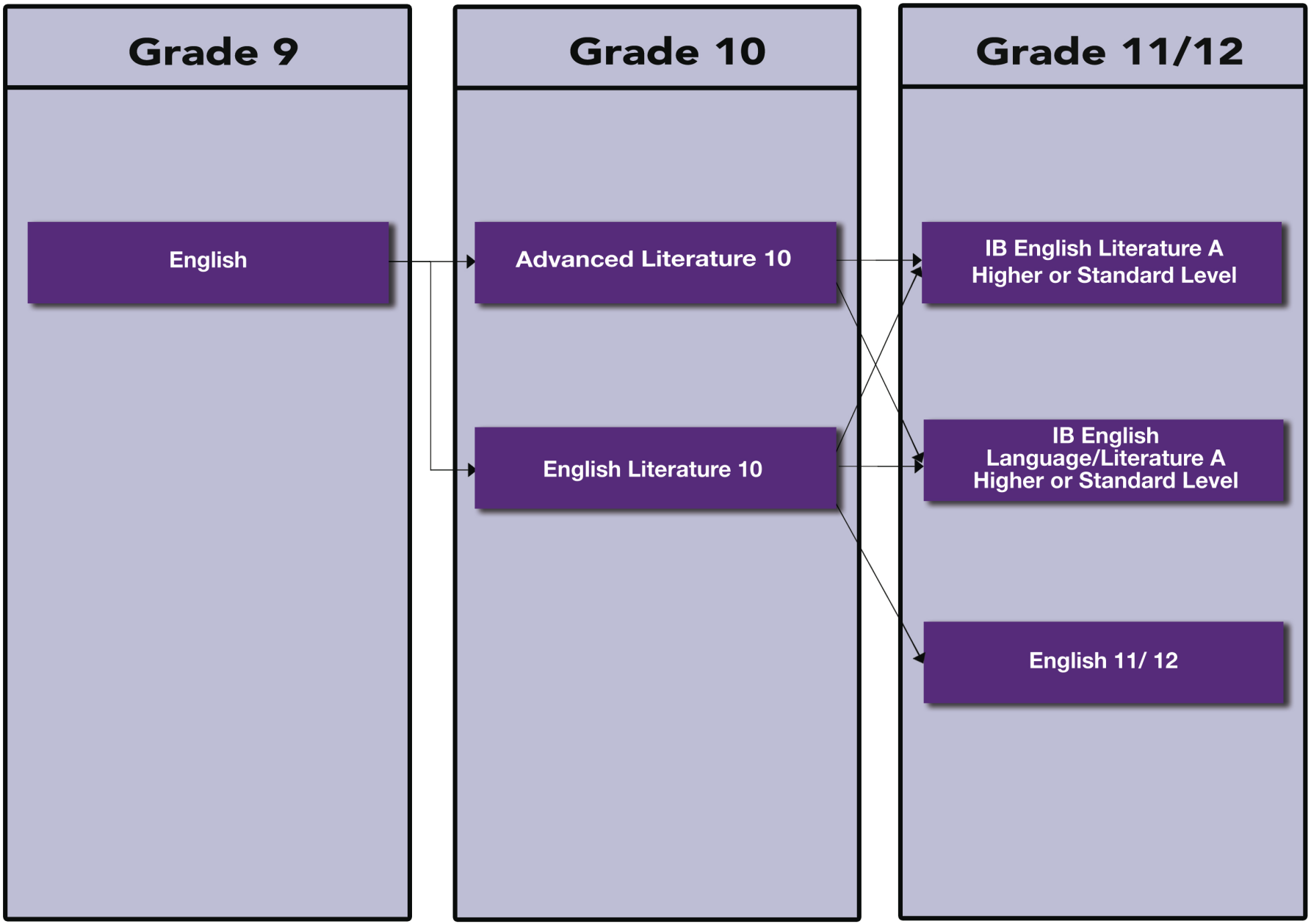
BRENT INTERNATIONAL SCHOOL MANILA provides each student with equal opportunity to access the IBDP. Students who successfully finish the Grade 10 requirements with a GPA of 3.30 are the kind of students who would most likely succeed in the IB Diploma Programme. Some students may opt to do the maximum number of four Higher Level courses. There is a stringent regulation regarding taking four higher level courses. Thorough consultations will take place and a grade 10 GPA of 3.70 or better along with the teacher's recommendations are crucial for a decision to be made. There may be students who finish Grade 10 successfully with a lower GPA whom the school allows to be part of the IB Diploma. With the right attitude towards schoolwork, genuine motivation to succeed, proper time management skill, and level-appropriate course placements, such students may earn their IB diploma, too.

Please carefully study the Upper School Course Planner to enable you to choose the right courses.

Some helpful reminders to consider:

1. What are your 3 HL course choices in grade 11?
2. What are your 3 SL course choices in grade 11?
3. What do you want to study in University?
4. Does the university require lab sciences or is computer science acceptable?
5. Have you checked your university and major study's required subjects and subject levels?
6. It is okay if you do not know where and what you want to study. What courses do you like or good at?
7. Waiting to communicate with us into your Junior year is much too late. Your teacher, counselor, and IB Coordinator are here for any questions or concerns.

English


Grade 9
Grade 10
Grade 11/12
English
Advanced Literature 10
English Literature 10
IB English Literature A
Higher or Standard Level
IB English
Language/Literature A
Higher or Standard Level
English 11/ 12

English 9
Prerequisite: None

This year-long course requires students to focus on:

Short Stories: Students examine style and form. They are required to look at a selection of texts analytically, and use vocabulary appropriate to this particular genre in a range of assessment activities.

Novel Study: Students examine themes and issues within chosen texts and focus intensely on comprehension, understanding, and critical writing.

Shakespeare and Drama: Students wrestle with Shakespearean language and themes, while analyzing the style and historical relevance of theater.

Poetry: Students gain an appreciation of techniques, themes and styles specific to this genre. They learn to analyze and critique poetry using these new skills.

Media and Research: Students delve deeply into the broader academic community. They learn to relate to the media, the library, and the Internet in a critical and reflective manner.

At the completion of the course students will be placed in one of the three Grade 10 classes at the recommendation of their teacher.

English Literature 10
Prerequisite: English 9

This course offers an overview of British Literature. While it follows a chronological pattern, its intention is to expose students to a variety of genres. It introduces students to a selection of major texts drawn from poetry, drama, short stories and novels. Students are also introduced to non-literary texts, such as news articles, advertisements, and film. The major objectives are to develop a historical and cultural framework for the study of English literature and to understand the importance of context in reading and understanding all texts, as well as introducing students to content similar to that of an IB English A course. Students learn the language of literary criticism, and the skill of close textual analysis. The students' responses are assessed through written and oral assignments, such as essays, oral commentaries, performances and creative writing. In order to prepare students for the IB curriculum, many assessments are modified versions of IB Literature and Language and Literature assessments, asssed through modified IB rubrics. Students will be prepared to enter the IB Language A English Literature course or the IB Language A English Language and Literature course at Standard Level.

Advanced Literature 10
Prerequisite: English 9 and teacher recommendation.

The 10 Literature Advanced course offers the same overview of British Literature offered in the 10 Literature course, but at a greater depth. It is designed for the highest achieving students, as identified by their grade 9 and 10 teachers. Students who choose to take Advanced Literature 10 should be prepared for a faster pace in covering content and higher expectations for assessment performance. Students who successfully complete Advanced Literature traditionally move on to study English at the HL level in grade 11, either in IB Language A Literature or IB Language A Language and Literature.

IB Language A: English Literature Higher and Standard Level
Prerequisite for HL: Advanced English Literature 10 and teacher recommendation.

Prerequisite for SL: English Literature 10

Through the study of a wide range of literature, this two-year course encourages students to appreciate the artistry of literature and to develop an ability to reflect critically on their reading. In view of the international nature of the IB and its commitment to intercultural understanding, this course does not limit the study of works to the products of one culture or the cultures covered by any one language. The study of works in translation is especially important in introducing students, through literature, to other cultural perspectives. The students' response to the study of literature is assessed through essays, written and oral commentaries, and creative writing.

Distinction between SL and HL

The model for Language A Literature is the same at SL and HL but there are significant quantitative and qualitative differences between the levels. SL students are required to study 10 works, whereas HL students are required to study 13. HL is designed for students with strong reading, writing and speaking abilities. It is conducted at a faster pace than SL with more reading and writing, and the assessment standards are more rigorous. SL is intended for students who are pursuing higher-level courses in other subject areas, or who need to work at a slower pace in order to develop and strengthen their reading, speaking and writing skills.

IB Language A: English Language and Literature Higher and Standard Level
Prerequisite for HL: Advanced English Literature 10 and teacher recommendation.

Prerequisite for SL: English Literature 10

IB Language A English Language and Literature is a two-year course which aims to develop students' skills of close analysis of literary and non-literary texts. Students explore the ways in which formal elements are used to create meaning in a text and how that meaning is affected by reading practices that are culturally defined. The study of literature in translation from other cultures is included because it contributes to a global perspective, thereby promoting an insight into, and understanding of, the different ways in which cultures influence and shape the experiences of life common to all humanity. Two parts of the course relate to the study of language, and two parts to the study of literature. The students are assessed through essays, written and oral commentaries, and creative writing.

Distinction between SL and HL

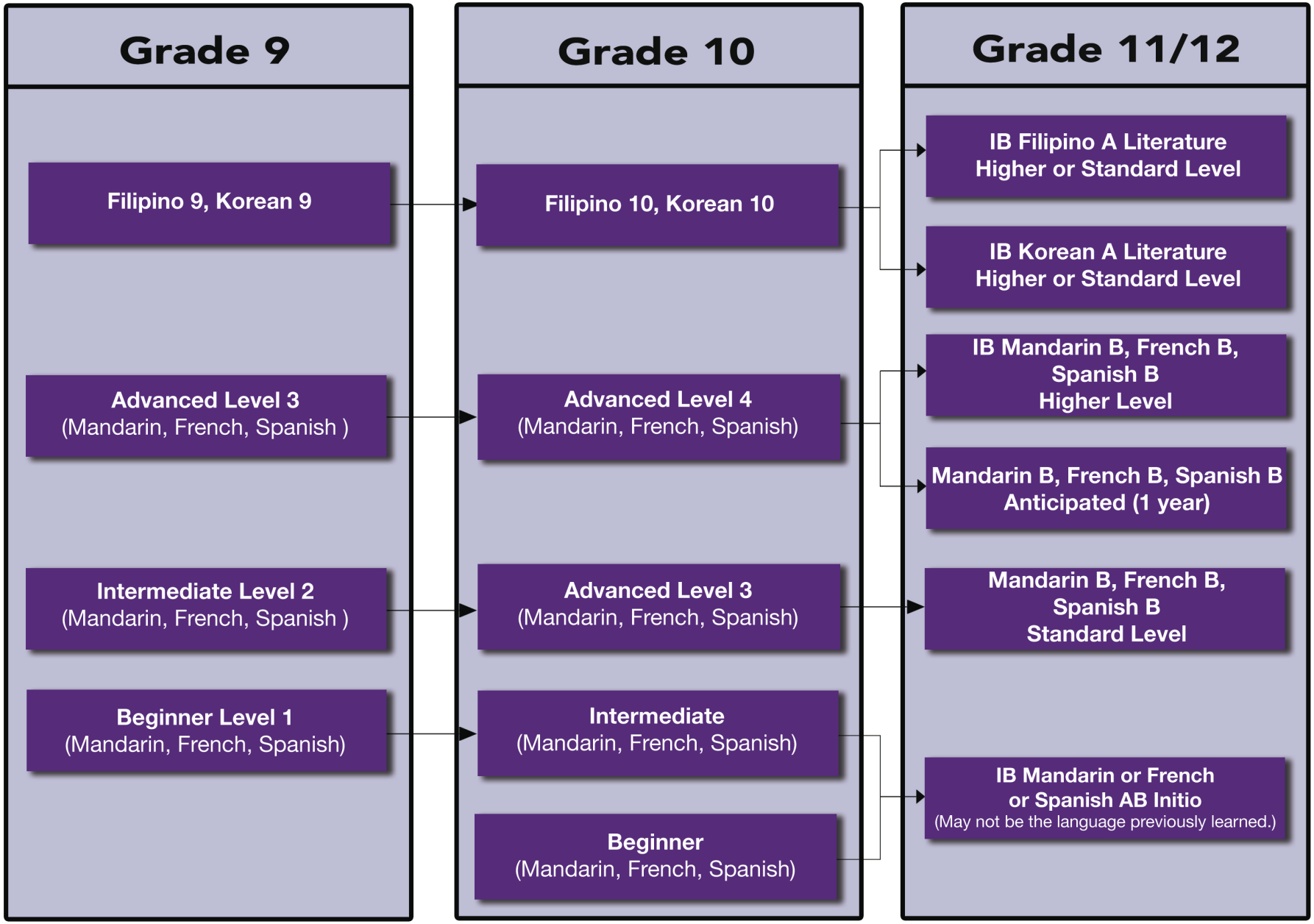
The model for IB Language A English Language and Literature is the same at SL and HL, but there are significant quantitative and qualitative differences between the levels. In the literature sections the number of texts prescribed is greater at HL than at SL. In the language sections students are expected to cover more texts and more topics at HL than at SL. HL is designed for students with strong reading, writing and speaking abilities. It is conducted at a faster pace than SL with more reading and writing, and the assessment standards are more rigorous. SL is intended for students who are pursuing higher-level courses in other subject areas, or who need to work at a slower pace in order to develop and strengthen their reading, oral and written skills.

11/12 English Language Arts

Prerequisites: English 10 or equivalent.

The English Language Arts 11/12 course is designed for students that do not require the IB diploma but still require ELA credits for a Brent Diploma. These students will sit in the same IB Language and Literature Standard Level course and will cover the same content. Assessments might be modified from those taking the IB Language and Literature Standard Level course.

Modern Languages
(A, B, Ab Initio)



Modern Languages
(A, B, Ab Initio)

IB A Literature-Filipino, Korean Higher Level
Prerequisite: Student's first language

Literature Higher Level is designed for students with very strong writing and speaking abilities. Students taking the course develop skills in reading, writing, speaking and critical thinking through the analysis of a variety of literary works. Assessment is through written and oral essays, commentaries and creative writing.

IB A Literature-Filipino, Korean Standard Level
Prerequisite: Student's first language.

Literature Standard Level is intended for students who are pursuing Higher Level courses in other areas. Over two years of the course, the class studies ten works of literature from varying genres, authors and cultural contexts. The course emphasizes literary criticism and the ability to write effective analytical essays.

Beginner Level 1 (Mandarin, French and Spanish)
Prerequisite: None

This course is for students with very little or no prior knowledge of the target language.

The four basic language skills, listening, speaking, reading and writing are developed using the communicative, thematic and interactive approach.

The themes that will be explored and studied will be the prescribed topics in the IB Ab Initio program like individual and society, leisure and work, urban and rural environment.

At the end of this course, students are expected to be able to express themselves in the target language using simple but grammatically correct structures both in written and oral form. They are also expected to read and understand short written passages as well essential notices like signs, menus, timetables, advertisements. The students are also expected to show an awareness of the culture of the target language.

Intermediate Level 2 (Mandarin, French and Spanish)
Prerequisite: Beginner Level 1

While still using the communicative, thematic and interactive approach making use of the topics prescribed in the IB Language Ab Initio program, this course introduces more complex grammatical structures and texts to expand the students' communication skills. This course also aims to provide students with a deeper familiarity of the culture of the target language. The students will also be given exposure to the literature of the target language through excerpts from poetry and prose for interpretation and appreciation.

At the end of this course, students will be expected to orally express their ideas with more fluency and ease using more complicated structures and vocabulary. They will also be expected to write longer and more detailed compositions using a variety of sentence structures and vocabulary.

Advanced Level 3 (Mandarin, French and Spanish)
Prerequisite: Intermediate Level 2

Aims to develop and expand the students' language skills in the advance level. Still using the communicative, thematic and interactive approach students will be able to express themselves in the target language making use of more sophisticated vocabulary and grammatical structures. Towards this end, greater emphasis is given on the students' fluency and ease of the advance grammar level in the target language. The students will be trained to write more formal compositions in the narrative, expository, descriptive and persuasive styles. This course also includes a survey of major literary works in the target language.

Advanced Level 4 (Mandarin, French and Spanish)
Prerequisite: Advanced Level 3

Prepares the students for Language B HL courses. As such, the course focuses on advance syntax and grammar. In addition to the different writing styles started in Level 3, the students are also expected to read and write different kinds of formal letters and other written communications. The students will be expected to discuss orally with high degree of proficiency the topics specified in the IB Language B program. The course also includes the study of selected major literary works in the target language.

Filipino 9/10 and Korean 9/10
Prerequisite: Must be student's first language.

This level of course is intended for native or near native speakers of the target language. It covers grammar and composition as well as speaking, listening and reading a variety of literature. Genres covered include novels, poetry, essays and drama. Students will also write research reports.

IB Language B Mandarin, French or Spanish Higher Level
Prerequisite: Advanced Level 4

Language B HL Level is a course for students who possess a high level of competence in the language. This course is primarily aims to reinforce accurate and effective oral and written communication within a range of contexts and registers. It also give them an awareness of issues, changes, culture and relationships in the global community while at the same time giving them an opportunity for enjoyment, creativity, and intellectual stimulation. It affords the students an understanding of the culture through two works of literature.

IB Language B Mandarin, French or Spanish Standard Level
Prerequisite: Advanced Level 3

The language B Standard Level is a language learning course for students who have successfully accomplished the advanced level. The main focus of this course is on language acquisition and the development of skills considerably beyond those expected of an Ab Initio candidate.

For the student to be able to be successful we recommend:
At least a C in the advanced level
Or the teacher recommendation from the intermediate level

IB Ab Initio Mandarin, French or Spanish Standard Level

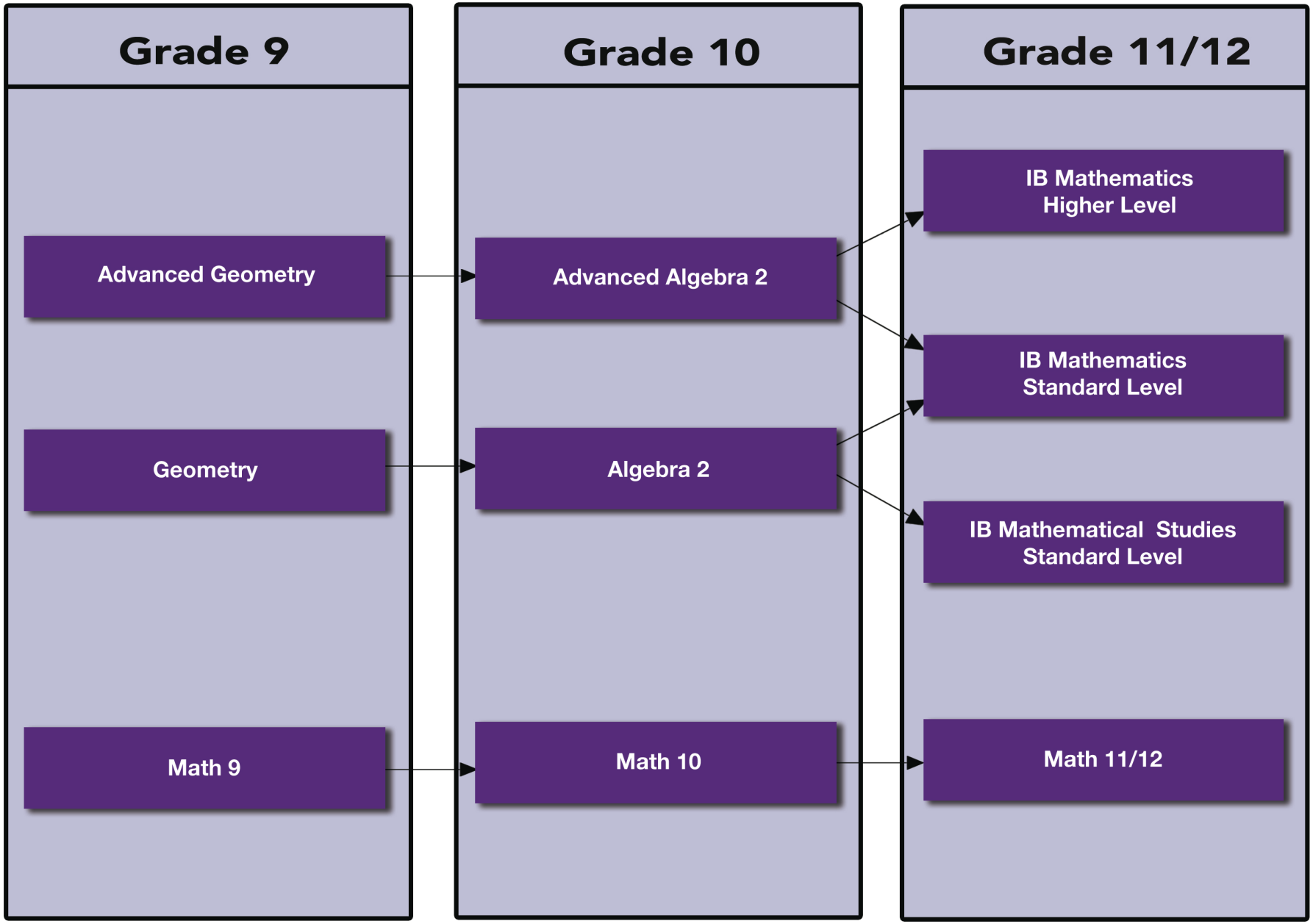
Prerequisite: None

The language Ab Initio courses are language learning courses for beginners, designed to be followed over two years by students who have no previous experience of learning the target language. The main focus of the courses is on the acquisition of language required for purposes and situations usual in everyday social interaction. Ab Initio language courses are only available at standard level.

Ab Initio language courses aim to develop a variety of linguistic skills, and a basic awareness of the culture(s) using the language, through the study of a core syllabus and language-specific syllabuses.

The types of language needed for these purposes and situations are more refined.

Mathematics



Mathematics

All Upper School students are expected to own a Texas Instruments TI-84 series graphing calculator.

Advanced Geometry

Prerequisites: Grade of B- or higher in Advanced Algebra 1 or Grade of A or higher in Algebra 1, and teacher recommendation.

Overview

Advanced Geometry is designed to prepare students for the IB Mathematics SL and Mathematics HL courses in grades 11 and 12. It caters to students who anticipate they will need a strong mathematical background in preparation for future studies. Students most likely to select this course will be those who expect to go onto study into fields that have a significant mathematical content, for example, engineering, computer programming, science, physics, chemistry, economics, psychology and business administration. Advanced Geometry is a demanding course and looks to challenge students who seek a deeper knowledge of mathematics. It is presumed that students entering this course have a solid grounding in algebra.

The primary focus of this course is Geometry. Students study the basic definitions, theorems used in inductive and deductive reasoning, principles of logic, properties of geometrical shapes, congruence, similarity, areas, and volumes. This course will also include a unit on statistical methods.

Geometry

Basic definitions
Reasoning and proof
Perpendicular and parallel lines
Congruent triangles
Properties of triangles
Quadrilaterals
Similarity
Right angles and trigonometry
Circles
Area of polygons and circles
Surface area and volume of solids

Statistics

Representation of data
Central tendency
Spread of data

Geometry

Prerequisites: Algebra I

Overview

Geometry is designed to equip students with fundamental mathematical skills. The course builds confidence and encourages an appreciation of mathematics in students who do not anticipate a need for mathematics in their future studies. It is designed to further prepare students for the IB Mathematical Studies SL course in grades 11 and 12. For the most part calculations are not complex, but instead require a solid understanding of math concepts. A student must develop skills necessary to apply these concepts to a wide variety of practical problems.

This course will focus on the basic skills and concepts in Geometry. Students study the basic definitions, theorems used in inductive and deductive reasoning, principles of logic, properties of geometrical shapes, congruence, similarity, areas, and volumes. Formal proofs will not be required. This course will also include a unit on statistical methods.

Geometry
- Basic definitions
- Reasoning and proof
- Perpendicular and parallel lines
- Congruent triangles
- Properties of triangles
- Quadrilaterals
- Similarity
- Right angles and trigonometry
- Circles
- Area of polygons and circles
- Surface area and volume of solids

Statistics
- Representation of data
- Central tendency
- Spread of data

Math 9

Prerequisite: Math 8 or equivalent.

This course will follow the same curriculum as Geometry, but assessments might be modified. Students who anticipate taking the IB Diploma in Grades 11 and 12, should choose the Geometry course.

Selection of this course, or transfer in/out of this course will require the approval of the counselor, principal, and teacher (if applicable). A parent meeting may also be requested.

Advanced Algebra 2

Prerequisite: Grade of B- or higher in Advanced Geometry or Grade of A or higher in Geometry, and teacher recommendation.

Overview

Advanced Algebra 2 is designed to prepare students who intend to enroll in IB Mathematics SL or Mathematics HL in grade 11. It caters for students who anticipate they will need a strong mathematical background in preparation for future studies. Students most likely to select this course will be those who expect to go on to study in fields that have a significant mathematical content, for example, engineering, computer programming, science, physics, chemistry, economics, psychology and business administration. Advanced Algebra 2 is a demanding course and looks to challenge students who are talented in mathematics. It is presumed that students entering this course have a strong grounding in algebra and geometry. The primary focus of this course is Advanced Algebra. This course is both fast paced and in-depth.

Algebra
- Equations and inequalities
- Linear equations and functions
- Systems of linear equations and inequalities
- Matrices

Quadratic functions
Polynomials and polynomial functions
Powers, roots and radicals
Exponential and logarithmic functions
Rational equations and functions
Quadratic relations and conic sections
Sequences and series
Probability
Trigonometric graphs, identities and equations

Algebra 2
Prerequisites: Algebra 1

Overview
Algebra 2 is designed to equip students with a solid foundation in mathematical skills. The course builds confidence and competency in mathematics. Algebra 2 is essentially a continuation of the Geometry course in ninth grade. Though it is designed to further prepare students for the IB Mathematical Studies SL course, satisfactory completion of the extension material can provide a pathway to Mathematics SL. The course requires a solid understanding of math concepts. A student must develop skills necessary to apply these concepts to a wide variety of practical problems.

Algebra
Equations and inequalities
Linear equations and functions
Systems of linear equations and inequalities
Matrices
Quadratic functions
Polynomials and polynomial functions
Powers, roots and radicals
Exponential and logarithmic functions
Rational equations and functions
Quadratic relations
Sequences and series
Probability
Trigonometric graphs

Math 10
Prerequisite: Math 9 or equivalent.

This course will follow the same curriculum as Algebra 2, but assessments might be modified. Students who anticipate taking the IB Diploma in Grades 11 and 12, should choose the Algebra 2 course.

Selection of this course, or transfer in/out of this course will require the approval of the counselor, principal, and teacher (if applicable). A parent meeting may also be requested.

IB Mathematics, Higher Level

Prerequisites: Grade of A- or above in Advanced Algebra 2, and teacher recommendation.

Overview

Mathematics HL is a challenging two-year course for Grade 11 and 12 students. It focuses on math concepts through the development of correct mathematical techniques and skills. This course caters to students with a strong background in mathematics that is competent in a range of analytical and technical skills. Those who take this course are expected to include mathematics as a major component of their university studies, either as a subject in its own right or within courses such as physics, engineering and technology. Students should have a strong interest in mathematics and enjoy meeting its challenges and engaging with its problems. This course requires students to study a broad range of mathematical topics through a number of different approaches and to a varying degree of depth. Students wishing to study mathematics in a less rigorous environment should therefore opt for one of the standard level courses, Mathematics Standard Level or Mathematical Studies Standard Level.

It covers a broad range of core topics under the following general headings:

- Algebra
- Functions and equations
- Circular functions and trigonometry
- Vectors
- Statistics and probability
- Calculus
- Further advanced studies are also taken in a selected unit.

At the conclusion of this course, IB Diploma or Certificate candidates will sit three external exams. These papers are designed to allow students to demonstrate what they know and can do. The first exam is two hours long and consists of 20 short questions. The second exam is also two hours long and consists of five compulsory extended response questions. The third exam is one hour long and focuses on the advanced studies unit. The external exams account for 80% of the total assessment for this course.

The remaining 20% is assessed internally. Students will conduct a mathematical exploration. This item of work will be internally assessed by the teacher and externally moderated by IB.

IB Mathematics, Standard Level

Prerequisite: Grade of B- or higher in Advanced Algebra 2 or Grade of A or higher in Algebra 2, and teacher recommendation.

Overview

Mathematics SL caters to Grade 11 and 12 students who already possess a strong knowledge of mathematics. This is a demanding two-year course, which focuses on math concepts through the development of correct mathematical techniques and skills. It provides a solid preparation for students whose future studies at university need a sound mathematical background as they prepare for future studies in subjects such as chemistry, economics, psychology and business administration.

It covers a broad range of core topics under the following general headings:

- Algebra
- Functions and equations
- Circular functions and trigonometry
- Vectors

- Statistics and probability
- Calculus

At the conclusion of this course, IB Diploma or Certificate candidates will sit two external exams over consecutive days. These papers are designed to allow students to demonstrate what they know and can do. The first exam is 1.5 hours long and consists of 15 short questions. The second exam is also 1.5 hours long and consists of five compulsory extended response questions. The two exams account for 80% of the total assessment for this course.

The remaining 20% is assessed internally. Students will conduct a mathematical exploration. This item of work will be internally assessed by the teacher and externally moderated by IB.

IB Mathematical Studies, Standard Level

Prerequisites: Algebra 2 and teacher recommendation.

Overview

Math is the only IB subject in which there are three different strands: Mathematical Studies (SL), Mathematics (SL) and Mathematics Higher Level (HL). Students most likely to select Math Studies are those whose main interests lie outside the field of mathematics, and for many Mathematical Studies students this will be their last formal mathematics course. It caters to students with varied backgrounds and abilities. More specifically, it is designed to build confidence and encourage an appreciation of mathematics. Students likely to need mathematics for the pursuit of further qualifications would be advised to consider Math Standard Level or Math Higher Level. The course applies mathematics to common general occurrences and to topics that relate to work, home, and leisure situations. For the most part calculations are not complex, but instead require a solid understanding of the math concepts. A student must develop skills necessary to apply these concepts to a wide variety of practical problems.

It covers a broad range of core topics under the following general headings:

- Introduction to the graphic display calculator
- Number and algebra
- Sets, logic and probability
- Functions
- Geometry and trigonometry
- Statistics
- Introductory differential calculus
- Financial mathematics

At the conclusion of this course, IB Diploma or Certificate candidates will sit two external exams over consecutive days. These papers are designed to allow students to demonstrate what they know and can do. The first exam is 1.5 hours long and consists of 15 short questions. The second exam is also 1.5 hours long and consists of five compulsory extended response questions. The two exams account for 80% of the total assessment for this course.

The remaining 20% is assessed internally. The students must complete a project that involves the collection and/or generation of data and the evaluation and analysis of that data. Projects may take on the form of mathematical modeling, investigations, applications, statistical surveys, etc. This project involves a piece of written work and it is based on personal research, guided and supervised by the teacher. It provides an

opportunity for the student to undertake an investigation of a mathematical nature in the context of another subject in the curriculum, or an interest of choice, using skills learned before and during the mathematical studies course. This process allows students to ask their own questions about mathematics. The project is internally assessed by the teacher and externally moderated by IB.

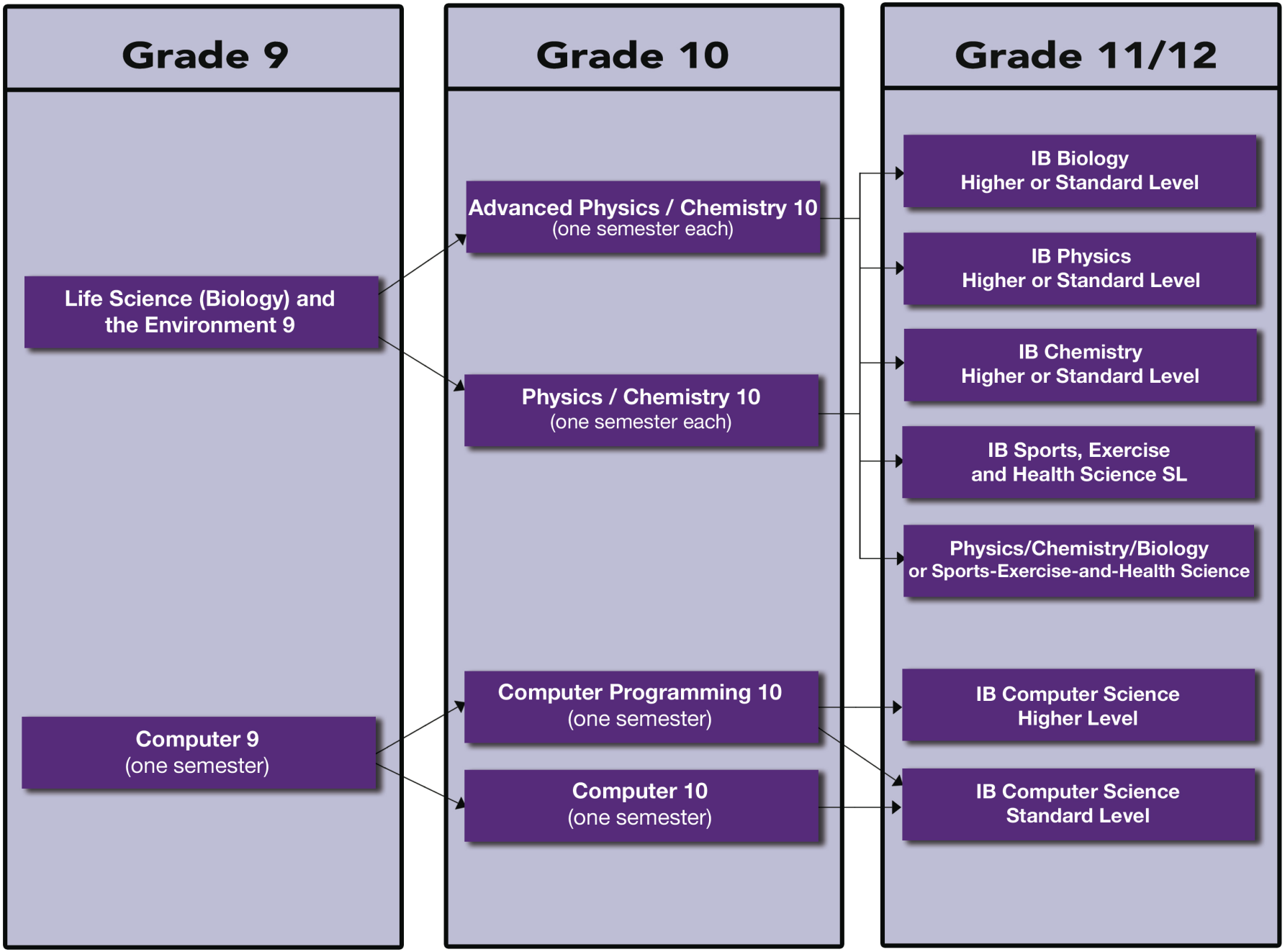
Mathematics 11/12

Prerequisites: Math 10 or equivalent.

The Math 11/12 course is designed for students that do not require the IB diploma or it's rigor but still require math credits for a Brent Diploma. These students will sit in the same IB Mathematical Studies Standard Level course and will cover the same content. Assessments might be modified from those taking the IB Mathematical Studies Standard Level course.

Non-IB course selections will require the approval of the counselor, principal, and teacher (if applicable). A parent meeting may also be requested to ensure all parties understand the decision not to pursue the IB Mathematical Studies course.

Science*



*See prerequisite information to determine Advanced, Programming, or Higher Level eligibility for each course.

Science

Biology 9

Prerequisite: None

Biology 9 is a year-long course. The course will focus on biological concepts giving students a background upon which they can base their course selection for grade 11 and 12 IB Biology and IB Environmental Systems and Societies. Emphasis in the course is placed on skill development, use of the scientific method, proper data collection techniques, analysis and presentation of data, drawing conclusions and evaluating results, and manipulative skills. A considerable amount of lab work is done and the second semester includes several dissections.

Topics include:

- Cells and Cell Processes
- Hereditary genetics
- Ecology and environmental issues
- Comparative human physiology

Chemistry 10

Prerequisite: None

Chemistry 10 is a semester course that studies matter, its composition, properties, structure, changes, and the energy transformations that accompany these changes. We begin by examining the atom and explore the many facets of the periodic table of elements. Students will spend a considerable amount of time on chemical bonding and how it affects physical and chemical properties. A variety of chemical reactions will be studied as students learn how to write and balance chemical equations. Additionally, the course focuses on stoichiometry concepts. Throughout the semester, students will be exposed to a variety of laboratory experiments. Students will be given the opportunity to explore various aspects of the scientific method and be taught how to plan experiments, present and analyze their data, and draw conclusions and evaluate their results.

Physics 10

Prerequisite: None

Physics 10 is a semester course that introduces students to various branches of physics. After an introduction to measurement, significant digits and the metric system, students will explore one-dimensional motion and Newton's three laws. Using trigonometry and other math tools students will explore Newton's 2nd law of motion in greater depth and discover how Newton's laws become powerful tools at predicting motion. In addition, students will study the concepts of work, energy, energy transformations, kinetic and potential energy, power, momentum, and circular motion. Finally, students will study the basic concepts found in electricity and magnetism. Throughout the semester, students will be exposed to a variety of laboratory experiments and will be given the opportunity to present and analyze their data as well as draw conclusions and evaluate their results.

Advanced Physics 10 / Advanced Chemistry 10
Prerequisite: Minimum grade of C+ in Biology 9, concurrently taking Adv. Algebra 2, and teacher recommendation.

The advanced physics and chemistry classes are semester–long courses designed to challenge students that have an interest in science and solid math skills. The same topics as the regular physics and chemistry class will be taught, but in more depth and at a faster pace. Additional topics may be added from the IB core curriculum. The advanced physics and advanced chemistry courses are highly recommended for students planning to enroll in IB Higher Level science courses. Some exceptions are made for students that show exceptional performance in the regular physics 10 or regular chemistry 10 courses.

IB Biology, Higher Level / Standard Level
Prerequisite for HL: Minimum grade of B+ in Biology 9 and teacher recommendation.

Prerequisite for SL: Minimum grade of C in Biology 9 and teacher recommendation.

Biology provides opportunities for scientific study of biological concepts and issues that will stimulate and challenge students. The Biology courses, both standard and higher levels, follow the IB syllabus and are extremely rigorous. Lab work is an essential component of the course. In addition to the regular coursework, students are required to complete a mock IA in the grade 11 year and a formal IA in the 12 year that will be submitted to the IB organization. We encourage students who are biologically minded to take the challenge.

The following is a breakdown of what is covered at each level:

Standard Level and Higher Level:

- Core Material (Theory)
  - Cell Biology
  - Molecular Biology
  - Genetics
  - Ecology
  - Evolution and biodiversity
  - Human physiology

*PREREQUISITE***:** Must have maintained a C or higher in 9 Biology, 10 Chemistry and Physics to take the Standard Level Course.

Additional Higher Level Material:

- Addition HL Material
  - Nucleic acids
  - Cell respiration and photosynthesis
  - Plant biology
  - Genetics and evolution
  - Animal physiology

Optional Topics for both Standard Level and Higher Level. The Higher Level students will choose from the same optional topics but cover the topic in greater detail:

Neurobiology and behavior
Biotechnology and bioinformatics
Ecology and conservation
Human physiology

- 40 Hours of lab work for standard level / 60 Hours of lab work for higher level

- Group 4 Project

IB Chemistry, Higher / Standard Level

Prerequisite for HL: Minimum of A- in Chemistry 10 or minimum of B in Adv. Chemistry 10, and teacher recommendation.

Prerequisite for SL: Minimum of B in Chemistry 10 or minimum of C in Adv. Chemistry 10, and teacher recommendation.

IB Chemistry is an experimental science course that combines academic study with the acquisition of practical and investigational skills. The course offers a deepening of fundamental concepts in Chemistry giving students a solid foundation thus enabling them to take on more advanced Chemistry courses in college.

The course reviews topics in Grade 10 Chemistry and gets more in depth in many areas. New subjects and option topics for higher level are also introduced to cater to the course requirements of higher education, such as medicine, biological and environmental sciences. The following are IB Chemistry topics:

Core Topics (additional higher level material will cover the same topics but in greater detail:

- Stoichiometric relationships
- Atomic structure
- Periodicity
- Chemical bonding and structure
- Energetics/thermochemistry
- Chemical kinetics
- Equilibrium
- Acids and bases
- Redox processes
- Organic chemistry
- Measurement, data processing, and analysis

Option Topics: (only one topic will be studied)

- Materials
- Biochemistry
- Energy
- Medicinal chemistry

Laboratory work is a critical part of the IB Chemistry Course with emphasis on analytical skills, experimental design, evaluation of the quality and validity of results and accurately communicating the results. Over the two–year IB Chemistry Program, HL students need to complete 60 hours of laboratory work while SL students need 40 hours. Evidences of practical work will be reflected in the students' internal assessment.

IB Chemistry Exams (*Diploma and Certificate*) are given only to those who have completed the two–year IB Chemistry Program.

IB Physics, Higher level/ Standard level

Prerequisite for HL: Minimum of A in Physics 10 or Minimum of B in Adv. Physics 10, concurrently taking Math SL, and teacher recommendation.

Prerequisite for SL: Minimum of A in Physics 10 or Minimum of B in Adv. Physics 10

Physics HL is a mathematically rigorous two-year course exploring a wide range of physics concepts. Physics HL is considered equivalent to a college level course in physics and students who sufficiently pass the external exams may be eligible for college credit. Furthermore, the course is sufficient to prepare students to sit the SAT II physics exam. In addition to covering the eight core topic areas (measurement and uncertainties, mechanics, thermal physics, waves, electricity and magnetism, circular motion and gravitation, atomic, nuclear and particle physics, and energy production), students will extend their exploration of some of the more advanced areas of physics. Some of the advanced areas of physics include the study of wave phenomena, fields, electromagnetic induction, and quantum and nuclear physics. In addition, students will study one additional optional topic. The optional topics include relativity, engineering physics, imaging, and astrophysics. Physics HL is a challenging, rewarding, and intriguing experience for those with an aptitude for mathematical reasoning and scientific inquiry.

Physics SL is limited to the eight core topic areas and one additional optional topic. The standard level course is identical to the higher-level course, but does not include the additional material, which tends to be more mathematically intensive. The standard level course is designed for those who enjoy mathematics and science but do not require the intensive study that comes with the higher level.

Along with studying physics content, students will investigate a wide variety of physical phenomenon through laboratory work. Students will take a rigorous approach to planning, data collection, data analysis, and evaluate their work with a critical mind. The culmination of approximately sixty hours of laboratory work, forty hours for the standard level, will provide a portfolio of investigations that will be used to award 20% of the student's IB assessment for physics. The other 80% will come from three external exams.

Physics, Chemistry, Biology, Computer Science, and Sports-Health-and-Exercise Science.

Prerequisite: Successful completion of grade 9 and 10 science, and teacher recommendation.

All Science courses are also offered at a non-IB level. The Non-IB Science courses are designed for students that do no require the IB diploma but still require science credits for the Brent diploma. The non-IB science courses occur during the same time period as IB Standard Level courses and the content covered is the same.

However, the IB course requirements, deadlines, and assessments will be modified. A student's transcript will show Physics I, Physics II, Chemistry I, Chemistry II, Biology I, Biology II, etc, depending upon the course taken. A combination of Physics I, Chemistry I, Biology I, Computer Science I, or Sports-Health-and-Exercise Science I may be taken for the junior and senior year (schedule permitting), but all level II courses require the completion of a level I course.

Non-IB course selections will require the approval of the counselor, principal, and teacher (if applicable). A parent meeting may also be requested to ensure all parties understand the decision not to pursue the IB subject specific science course.

Computer Studies 9 (Semester)
Prerequisite: None

This one-semester course introduces students to the concepts and mechanics of modern web design using HTML and CSS, graphics design, video production and databases. Real-world problems and concepts of good visual design are stressed in all units. Students will also become familiar with the basic hardware used in Personal Computers. In addition to this, students will become aware of the social and ethical issues involved in the use of these technologies.

Computer Studies 10 (Semester)
Prerequisite: None

In this one-semester course, students will gain practical experience and understanding in developing professional web pages, creating original graphics, producing digital movies with more extensive media tools, developing simple program applications with Java programming and learning the technical concepts of network. The course will also give students a view of the social and ethical issues involved in the use of these technologies.

Computer Programming 10 (Semester)
Prerequisite: Computer 9 and teacher recommendation.

This semester-long programming course will cover many of the concepts necessary to develop a good foundation for the logic and algorithm design required at the IB level. Students will explore branching, iteration techniques, and static data structures. Students who complete this course with a grade of B or better will automatically be recommended for IB Higher Level Computer Science.

IB Computer Science, Higher Level / Standard Level
Prerequisite for HL: Minimum of B+ in Computer Programming 10, and teacher recommendation.

Prerequisite for SL: Minimum of B in Computer 10 or Programming 10

An intensive two-year course at both Higher and Standard Level require an understanding of the fundamental concepts of computational thinking as well as knowledge of how computers and other digital devices operate. Many theoretical concepts, including system design and analysis, computer architecture, binary representation, networks, operating systems, application systems, logic gates, algorithm design and programming will be covered. A major project in the second year of the course with emphasis on the development of a computational solution would make up 20% (HL) and 30% (SL) of a student's overall IB mark. Many universities consider Higher Level to be equivalent to the first year course of a Computer Science program and may give advance credit to students who receive high marks from IB.

IB now allows this course to be taken in lieu of a science (Biology, Chemistry or Physics). This may not necessarily be in a student's best interest with regards to college admissions. Therefore approval from the guidance counselor is required to take this option.

IB Sports, Exercise and Health Science SL

Prerequisite: Successful completion of grade 9 and 10 science.

The Sports, Exercise and Health Science course (SEHS) is an applied, experimental science course that incorporates the disciplines of biology, chemistry, physics, anatomy and physiology, biomechanics, psychology and nutrition in the context of sport, exercise and health. A combination of content and experimental work provides the opportunity for students to acquire the knowledge and understanding necessary to apply scientific principles and analyze human performance.

Like all IB science courses, the SEHS covers international dimensions such as international sporting competition and ethical issues that exist within sporting competitions.

Core Topics:

- Anatomy
- Exercise Physiology
- Energy Systems
- Movement Analysis
- Skill in Sport
- Measurement and Evaluation of Human Performance

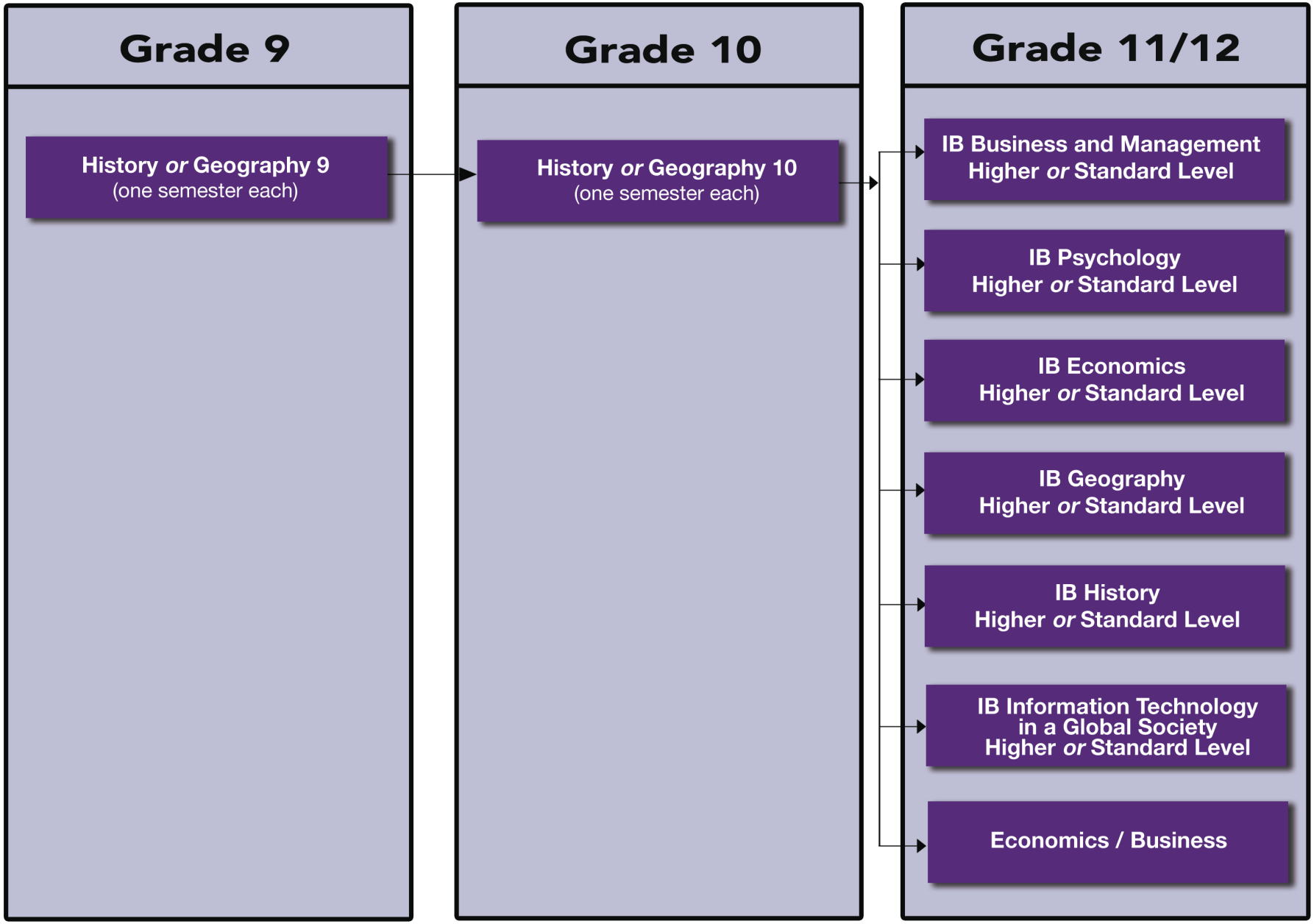
Option Topics:

- Optimizing Physiological Performance
- Psychology of Sport
- Physical Activity and Health
- Nutrition for Sport, Exercise and Health

Assessment

Practical work is an integral part of the course and contributes 20 % of the final IB grade. The practical scheme of work (PSOW) also includes the "Group 4 project". The External Exams make up the addition 80% of the IB exam.

Social Science



Social Science

World History 9
Prerequisite: None

Students will be introduced to World History as preparation for the IB History course. This course is taught thematically, so that topics are linked to give students a sense of continuity and development in historical trends. They will analyze by comparing and contrasting events that happened around the world at different times. This is a skill-based subject, which expands on the students' previous experience with primary and secondary sources, document analysis, essay writing and formulation of arguments.

Core Topics
- Revolution
- Industrial revolution
- Imperialism

Physical Geography 9
Prerequisite: None

Geography 9 focuses on the physical features of the earth. Emphasis is placed on the interrelationship between humans and the environment. The core concepts studied enable students to determine how human actions are influenced by the physical environment.

Core Topics
- Maps and mapping
- Landforms
- World water
- Natural disasters
- Environmental issues
- Current issues

World History 10
Prerequisite: None

This course is designed to provide students with a fundamental understanding of some of the most transformative events of the modern era. Having studied the rise of democracy and enlightenment in Europe in 9th Grade World History, students will begin study with the collapse of the European order and the origins of the First World War. They will then examine the effects of these events on the increasingly globalized world by studying key events between the two world wars. This course will close the semester with a look at World War II and an introduction of the Cold War. This course provides a survey approach to the same areas of focus studied during IB History. In addition, the Philippines will be studied in the context of some of these key 20th century events.

Global Issues in Geography 10
Prerequisite: None

This course is designed to examine the three major areas in Human Geography – population-related issues, models and theories, patterns in migration, poverty reduction, basic economics and globalization. Each theme is dealt with from global and local perspectives.

The objective of the course is to enable students to attain a comprehensive knowledge and understanding of geographical concepts with associated skills development, the geographical implications of the causes and consequences with their inter-relationship to human development and progress, and the development of reasoned and balanced analysis based on respect for attitudes, values and perspectives of cultural differences.

Core Topics
- Population studies
- Patterns in Migration
- Globalization

Note: Students looking to take IB courses are strongly encouraged to attend the IB course orientation sessions offered by teachers prior to final course sign ups.

IB Business and Management, Higher Level / Standard Level
Prerequisite: Algebra 2 and English Literature 10

Business and Management is a rigorous and dynamic discipline that examines business decision-making processes and how these decisions impact on and are affected by internal and external environments. It is the study of both the way in which individuals and groups interact in an organization and of the transformation of resources.

Business management studies business functions, management processes and decision-making in contemporary contexts of strategic uncertainty. It examines how business decisions are influenced by internal and external factors, and how these decisions impact upon its stakeholders. Business management also explores how individuals and groups interact within an organization, how they may be successfully managed and how they can ethically optimize the use of resources in a world with increasing scarcity and concern for sustainability. The course is designed to develop students' knowledge and understanding of business management theories, as well as their ability to apply a range of tools and techniques. Students learn to analyze, discuss and evaluate business activities at local, national and international levels. The course covers a range of organizations from all sectors, as well as the socio-cultural and economic contexts in which those organizations operate.

Emphasis is placed on strategic decision-making and the operational business functions of human resource management, finance and accounts, marketing and operations management. Links between the topics are central to the course, as this integration promotes a holistic overview of business management. Through the exploration of six concepts underpinning the subject (change, culture, ethics, globalization, innovation and strategy), the business management course allows students to develop their understanding of interdisciplinary concepts from a business management perspective.

Distinction between HL and SL

The HL course in business management differs from the SL course in business management in terms of the:

- recommended hours devoted to teaching (240 hours for HL compared to 150 hours for SL)
- extra depth and breadth required (extension units for HL)
- nature of the internal assessment task
- nature of the examination questions.

HL and SL core

Topic 1: Business Organization and Environment
Topic 2: Human Resources
Topic 3: Accounts and Finance
Topic 4: Marketing
Topic 5: Operations Management

Internal Assessment:
HL – Research Project (2,000 words)
SL – Written Commentary (1,500 words)

For the student to be successful in this course, we recommend:
For **Standard Level**, a minimum of B- in Algebra 2
a minimum of B in English Literature 10

For **Higher-Level**, a minimum of C- in Advanced Algebra 2
a minimum of B in English Literature 10

IB Economics, Higher Level / Standard Level
Prerequisite: Algebra 2 and English Literature 10

Economics is a dynamic social science, forming part of group 3—individuals and societies. The study of economics is essentially about dealing with scarcity, resource allocation and the methods and processes by which choices are made in the satisfaction of human wants.

As a social science, economics uses scientific methodologies that include quantitative and qualitative elements.

The IB Diploma Programme economics course emphasizes the economic theories of microeconomics, which deal with economic variables affecting individuals, firms and markets, and the economic theories of macroeconomics, which deal with economic variables affecting countries, governments and societies. These economic theories are not to be studied in a vacuum—rather, they are to be applied to real-world issues. Prominent among these issues are fluctuations in economic activity, international trade, economic development and environmental sustainability.

The ethical dimensions involved in the application of economic theories and policies permeate throughout the economics course as students are required to consider and reflect on human end-goals and values. The economics course encourages students to develop international perspectives, fosters a concern for global issues, and raises students' awareness of their own responsibilities at a local, national and international level. The course also seeks to develop values and attitudes that will enable students to achieve a degree of personal commitment in trying to resolve these issues, appreciating our shared responsibility as citizens of an increasingly interdependent world.

The specific skills of the economics course are developed within the context of the course itself. The ability to understand and explain abstract concepts and the ability to write in a logically structured manner are distinct advantages in economics.

Distinction between HL and SL:

SL and HL students of economics are presented with a common syllabus, with an HL extension in some topics. The syllabus for both SL and HL students requires the development of certain skills and techniques, attributes and knowledge—as described in the assessment objectives of the programme.

While the skills and activity of studying economics are common to both SL and HL students, the HL student is required to acquire a further body of knowledge—including the ability to analyse, synthesize and evaluate that knowledge—and to develop quantitative skills in order to explain and analyse economic relationships.

Syllabus:

Section 1: Microeconomics
1.1 Competitive markets: demand and supply **(some topics HL only)**
1.2 Elasticity
1.3 Government intervention **(some topics HL extension, plus one topic HL only)**
1.4 Market failure **(some topics HL only)**
1.5 Theory of the firm and market structures **(HL only)**

Section 2: Macroeconomics
2.1 The level of overall economic activity **(one topic HL extension)**
2.2 Aggregate demand and aggregate supply **(one topic HL only)**
2.3 Macroeconomic objectives **(some topics HL extension, plus one topic HL only)**
2.4 Fiscal policy
2.5 Monetary policy
2.6 Supply-side policies

Section 3: International economics
3.1 International trade **(one topic HL extension, plus one topic HL only)**
3.2 Exchange rates **(some topics HL extension)**
3.3 The balance of payments **(one topic HL extension, plus some topics HL only)**
3.4 Economic integration **(one topic HL extension)**
3.5 Terms of trade **(HL only)**

Section 4: Development economics
4.1 Economic development
4.2 Measuring development
4.3 The role of domestic factors
4.4 The role of international trade **(one topic HL extension)**
4.5 The role of foreign direct investment (FDI)
4.6 The roles of foreign aid and multilateral development assistance
4.7 The role of international debt
4.8 The balance between markets and intervention

Internal assessment: Portfolio of three commentaries

Prerequisites:
HL: Minimum B- in Social Science 10
Passing grade in Advanced Algebra 2 OR minimum of B- in Algebra 2
Passing grade in English Literature Honors OR minimum of B- in English Literature/Language.

SL: Minimum of C in Social Science 10
Passing grade in Math Methods OR minimum of C in Math Studies.
Passing grade in English Literature Honors OR minimum of C in English Literature/Language.

Economics / Business

Prerequisite: English 10

The Business and Economics course is designed to give students an understanding and appreciation of basic principles, theories and concepts in Business & Management and Economics. This course will focus on integrating and linking various modules found in both courses to give students, by the end of the course, a holistic overview.

Economics is a dynamic social science, forming part of the study of individuals and societies. The study of economics is essentially about the concept of scarcity and the problem of resource allocation. Although economics involves the formulation of theory, it is not a purely theoretical subject: economic theories can be applied to real-world examples.

The aims of the Economics portion of this course are to:

1. Provide students with a core knowledge of economics
2. Encourage students to think critically about economics
3. Promote an awareness and understanding of internationalism in economics
4. Encourage students' development as independent learners
5. Enable students to distinguish between positive and normative economics
6. Enable students to recognize their own tendencies for bias.

Business and Management is the critical study of the ways in which individuals and groups interact in a dynamic business environment. It is an academic discipline that examines how business decisions are made and how these decisions make an impact on internal and external environments.

The aims of the Business and Management section of this course are to:

1. Promote the importance of exploring business issues from different cultural perspectives
2. Encourage a holistic view of the world of business
3. Enable the student to develop the capacity to think critically
4. Enhance a student's ability to make decisions
5. Enable a student to appreciate the pace, nature and significance of change.

IB Geography, Higher Level / Standard Level

Prerequisite: Geography 10 and English Literature 10

Geography is a dynamic subject that is firmly grounded in the real world and focuses on the interactions between individuals, societies and the physical environment in both time and space. It seeks to identify trends and patterns in these interactions and examines the processes behind them. It also investigates the way that people adapt and respond to change and evaluates management strategies associated with such change. Geography describes and helps to explain the similarities and differences between spaces and places. These may be defined on a variety of scales and from a range of perspectives.

Within group 3 subjects, geography is distinctive in that it occupies the middle ground between social sciences and natural sciences. The Diploma Programme geography course integrates both physical and human geography, and ensures that students

acquire elements of both scientific and socio-economic methodologies. Geography takes advantage of its position between both these groups of subjects to examine relevant concepts and ideas from a wide variety of disciplines. This helps students develop an appreciation of, and a respect for, alternative approaches, viewpoints and ideas.

Geography seeks to develop international understanding and foster a concern for global issues as well as to raise students' awareness of their own responsibility at a local level. Geography also aims to develop values and attitudes that will help students reach a degree of personal commitment in trying to resolve these issues, appreciating our shared responsibility as citizens of an increasingly interconnected world.

The course embodies global and international awareness in several distinct ways. It examines key global issues, such as poverty, sustainability and climate change. It considers examples and detailed case studies at a variety of scales, from local to regional, national and international. Inherent in the course is a consideration of different perspectives, economic circumstances and social and cultural diversity.

Students at standard level (SL) and higher level (HL) in geography are presented with a syllabus that has a common core and optional themes. HL students also study the higher level extension.

Core theme—patterns and change (SL and HL)

1. Changing Population
2. Global Climate: vulnerability & resilience
3. Patterns in Resource Consumption & Security

Optional themes (SL and HL)

Two optional themes are required at SL and three optional themes are required at HL.

A. Freshwater—issues and conflicts
B. Oceans and their coastal margins
C. Extreme environments
D. Hazards and disasters—risk assessment and response
E. Leisure, sport and tourism
F. The geography of food and health
G. Urban environments

HL extension—global interactions (HL only)

1. Power, places and networks
2. Human development and diversity
3. Global risks and resilience

Fieldwork (SL/HL)

Fieldwork, leading to one written report based on a fieldwork question, information collection and analysis with evaluation.

For the student to be successful in this course, we recommend:

HL: Minimum of B- in Geography 10 and English Literature 10

SL: Minimum of C in Geography 10 and English Literature 10

IB History, Higher Level / Standard Level
Prerequisite: History 10 and English Literature 10

"The IB Diploma Programme (DP) history course is a world history course based on a comparative and multi- perspective approach to history. It involves the study of a variety of types of history, including political, economic, social and cultural, and provides a balance of structure and flexibility. The course emphasizes the importance of encouraging students to think historically and to develop historical skills as well as gaining factual knowledge. It puts a premium on developing the skills of critical thinking, and on developing an understanding of multiple interpretations of history. In this way, the course involves a challenging and demanding critical exploration of the past." (International Baccalaureate History Subject Guide).

The course requires an in-depth study of the main developments in 19th and 20th century world history. It will begin with a focus on the two World Wars and the global expansion of German, Italian, and Japanese powers during the first half of the 20th century and then end with an in-depth study of the Cold War and some of the related conflicts.

Course Outline:

The following is an abbreviated outline of the course material, divided up into two years of instruction.

1. World War I (11th grade)
2. Japanese Expansion (11th grade)
3. Formation of and Expansion of Germany (11th grade)
4. Formation of and Expansion of Italy (11th grade)
5. Spanish Civil War (11th grade)

1. World War II (12th grade)
2. The Cold War (12th grade)
3. Case Studies (12th grade)
4. Exam Preparation (12th grade)

In addition, all students will complete an individual research project to be internally assessed under I.B. criteria.

IB Information Technology in a Global Society, Higher Level / Standard Level
Prerequisite: Computer 10 and teacher recommendation.

Emerging technologies continue to re-define many aspects of society today. The generation of digital and online citizens continue to grow as technology changes how we communicate, transact and become more productive. But even the most useful technology comes with a disadvantage.

This two-year course is an investigation of the social and ethical ramifications of the use of information technology (IT) in all of its forms. Students will research and discuss how IT affects people and industries around the world in both positive and negative ways while understanding emerging IT terminologies and concepts. The course requires strong analytical and writing skills as students tackle a variety of local and global issues surrounding IT systems.

The course evaluates emerging technologies against these social and ethical issues:

1. Reliability and Integrity
2. Security
3. Privacy and Anonymity
4. Intellectual Property
5. Authenticity
6. The Digital Divide and Equality of Access
7. Surveillance
8. Globalization and Cultural Diversity
9. Policies
10. Standards and Protocols
11. People and Machines
12. Digital Citizenship

An introduction to IT project management will also be discussed, as students prepare a major Project to be submitted for IB evaluation. The Project will include the development a real IT-based product for a client, to solve a real-world problem.

For Higher Level students, a Case Study drawn form an actual situation involving the use of IT systems will be analyzed and used as the basis for the third examination paper.

IB Psychology, Higher Level / Standard Level

Prerequisite: Algebra 2 and English Literature 10

Psychology is defined as the scientific study of behavior and mental processes. Having its roots in both the natural and social sciences, a variety of research methods and applications have evolved into gaining a deeper understanding of human behavior in the context of the individual, group and society. Psychology provides a basic foundation for analyzing, understanding and interpreting human behavior.

IB Psychology seeks to examine the role and interaction of the biological, cognitive and socio-cultural dimensions of human behavior. Students investigate how psychological inquiry and research is conducted, with an emphasis on critical thinking and ethical considerations concerning research methodology and application. With this, students appreciate the discipline and gain a deeper understanding of themselves as well as of the diversity of human behavior.

IB Psychology covers the following topics:

1.Core Units (compulsory for both HL and SL)

- Approaches to researching behavior
    i. Ethics
    ii. quantitative methods
    iii. qualitative methods
    iv. research design
- Biological Approach to understanding behavior
- Cognitive Approach to understanding behavior
- Socio-cultural Approach to understanding behavior

*2. Options (*One option is required for SL and two options are required for HL)

- Abnormal psychology
- Developmental psychology
- Health psychology
- Psychology of human relationship

3. *Experimental Study* (compulsory for both SL and HL)

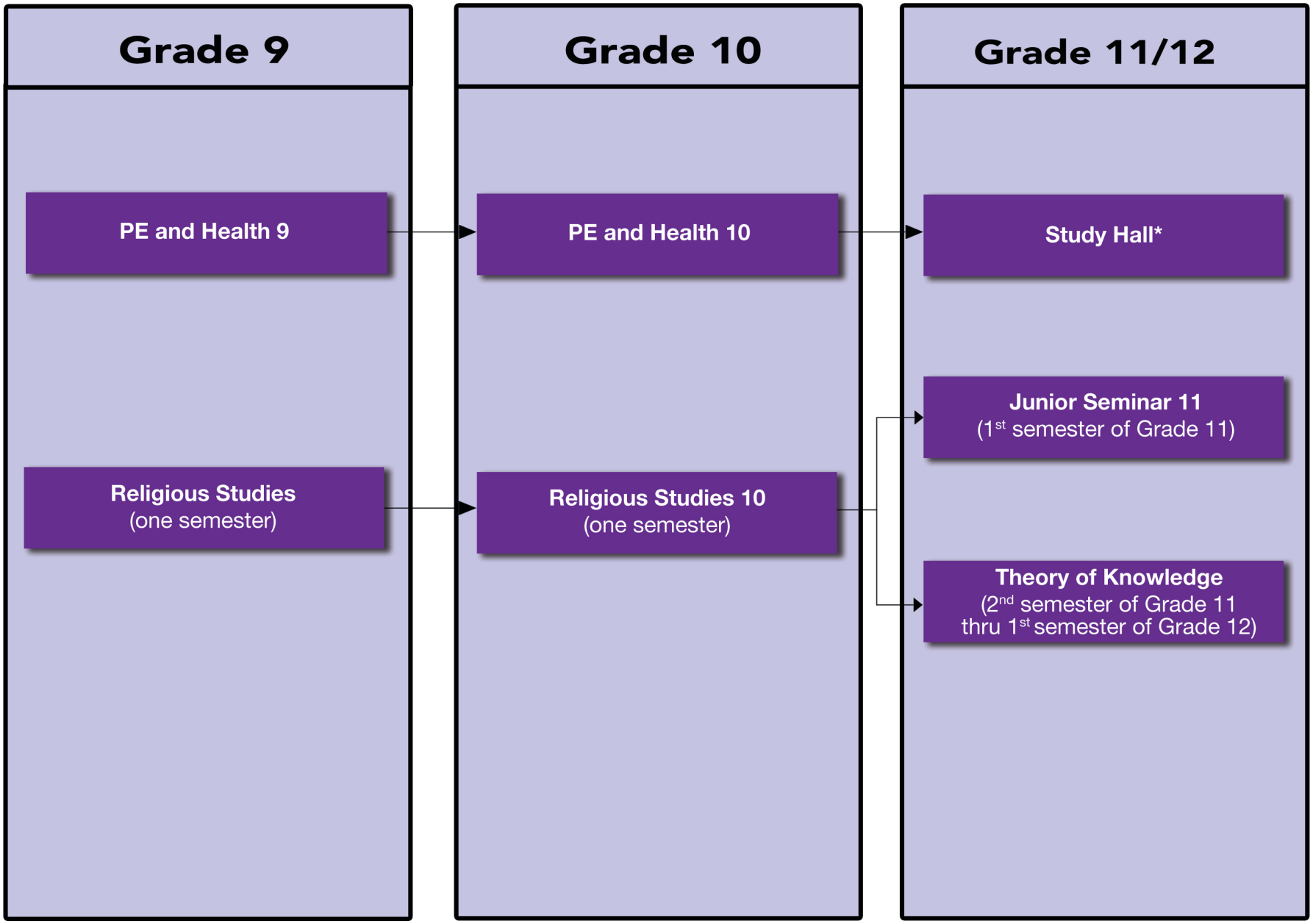
- Students will design, conduct, analyze and produce a report on a simple psychological experiment.

The course is reading and writing intensive. For the student to be successful in this course, we recommend:

HL: Minimum B- in Social Science 10
Passing grade in Adv. Algebra 2 OR minimum of B- in Algebra 2
Minimum of B- in Adv. Literature OR minimum of B in Literature.

SL: Minimum of C in Social Science 10
Passing grade in Adv. Algebra 2 OR minimum of C in Algebra 2.
Passing grade in Adv. Literature OR minimum of C in Literature.

PE, Religious Studies and TOK



*Students can opt to take another core subject area or elective if it fits into their schedule.

PE, Religious Studies and TOK

Health and Physical Education 9
Prerequisite: None

Health and Physical Education 9 aims to introduce recreational activities that students may continue to be involved in beyond their school years. Skill acquisition, fitness components, tactics, refereeing, sporting values and attitudes are all stressed. Students will have the opportunity to participate in a variety of sports and physical activities including aquatics, invasion games, net games, and physical fitness activities. Students must demonstrate proficiency in the skills and fitness required for a variety of sports and demonstrate the values/attitudes essential for competition.

During Health classes the students will learn about the following topics: The importance of mental and emotional health, nutrition, human reproduction, and illegal drugs. Students will be given factual information, research assignments, and an opportunity to discuss the related health issues. The role and influence of the media and advertising on our health will also be discussed.

Studies in Health and Physical Education promote a greater understanding and appreciation of physical activity and movement, food and nutrition, health, safety, human development and human relations. The Brent HPE Curriculum examines personal actions, beliefs, attitudes and values held by families, cultural groups, and the wider community, and ultimately promotes sport and physical activity as necessary components of everyday life.

State of the art facilities allow the curriculum to be taught in modern, well-equipped gymnasiums, pool, tennis courts, dance room, athletics running track and fields.

The HPE objectives and goals integrate the Expected School wide Learning Results (ESLR's), with the aim of developing individual students who are responsible global citizens.

Religious Studies 9 (Semester)
Prerequisite: None

Grade 9 Religious Studies is an introduction to the Old Testament. Within a historical framework, stories, events, and personalities are chosen to illustrate the ideas and themes of the book. The emphasis is the emergence of the people of Israel and their role in God's plan. The course will conclude with a study of the influence of the Old Testament in the foundational ideas of Western Civilization, particularly through a look at art, music, literature and law.

Health and Physical Education 10
Prerequisite: None

Health and Physical Education 10 is a continuation of HPE 9 but with greater emphasis placed on game strategies, tactics, and lifetime physical fitness. Student will participate in a variety of sports and physical activities including aquatics, invasion games, nets games, and physical fitness activities. Students must demonstrate proficiency in the skills and fitness required for a variety of sports, and demonstrate the values/attitudes essential for competition.

During Health classes the students will learn about various topics including Adolescence, Adulthood, and Life skills, Environmental Health, Reproductive Health, and Safety Education. Students will be given factual information, research assignments, and an opportunity to discuss the related Health issues. The role and influence of the media and advertising on our Health will also be discussed.

Studies in Health and Physical Education promote a greater understanding and appreciation of physical activity and movement, food and nutrition, health, safety, human development and human relations. The Brent HPE Curriculum examines personal actions, beliefs, attitudes and values held by families, cultural groups and the wider community, and ultimately promote sport and physical activity as necessary components of everyday life.

State of the art facilities allow the curriculum to be taught in modern, well-equipped gymnasiums, pool, tennis courts, dance room, athletics running track and fields.

The HPE objectives and goals integrate the Expected School wide Learning Results (ESLR's), with the aim at developing individual students who are responsible global citizens.

Religious Studies 10 (Semester)

Prerequisite: None

This course explores the life and teachings of Jesus Christ based mainly on the testimony of the Synoptic Gospels, with Mark serving as the basic text. The course further explores contemporary portrayals of Jesus, and takes a brief look at the subsequent rise and spread of world Christianity to prepare students for Grade 11Religious Studies (Junior Seminar). The central aim of this course is to raise questions and provide students with the desire and the means to search for answers – an endeavor that should last a lifetime.

Junior Seminar (Semester 1 Grade 11)

Prerequisite: English 10

Junior Seminar is a bridge course that provides a link between the Brent *Religious Studies* program and the IB required *TOK* (Theory of Knowledge) course. Divided into three units, the course addresses some fundamental issues related to the nature, meaning and purpose of our lives in this universe. The first unit – *The Stories We Tell* – starts with the premise that we are all, in essence, products of certain stories and narratives that surround us, and it seeks to answer questions such as: Where do our stories come from? Can we change our stories or escape the stories we are born into? How do we know our stories are true? The second unit – *Religious Knowledge Systems* **–** deals with metaphysical concepts and themes such as God, faith, origin and purpose of life and life after death. In the process of investigating religion as an area of knowledge, as a belief system and as a life governing entity, this unit seeks to explore questions such as: Does God exist? What qualifies as a religion? What is faith? Do we really know anything, or is everything ultimately a question of belief? The third unit – *Ethics* – deals with questions and dilemmas related to everyday human behavior and judgment. While religious perspectives clearly and boldly state what we 'ought' to do and what we 'ought not' to do, the philosophical discourse on this subject continues to be vague and contentious. For this reason, this unit explores questions such as: Where do we get our own sense of right and wrong? Is there an absolute moral law? Can we be moral without the dictates of religion and/or God? In the process, it encourages students to apply logic and reason to reflect upon and articulate their positions on

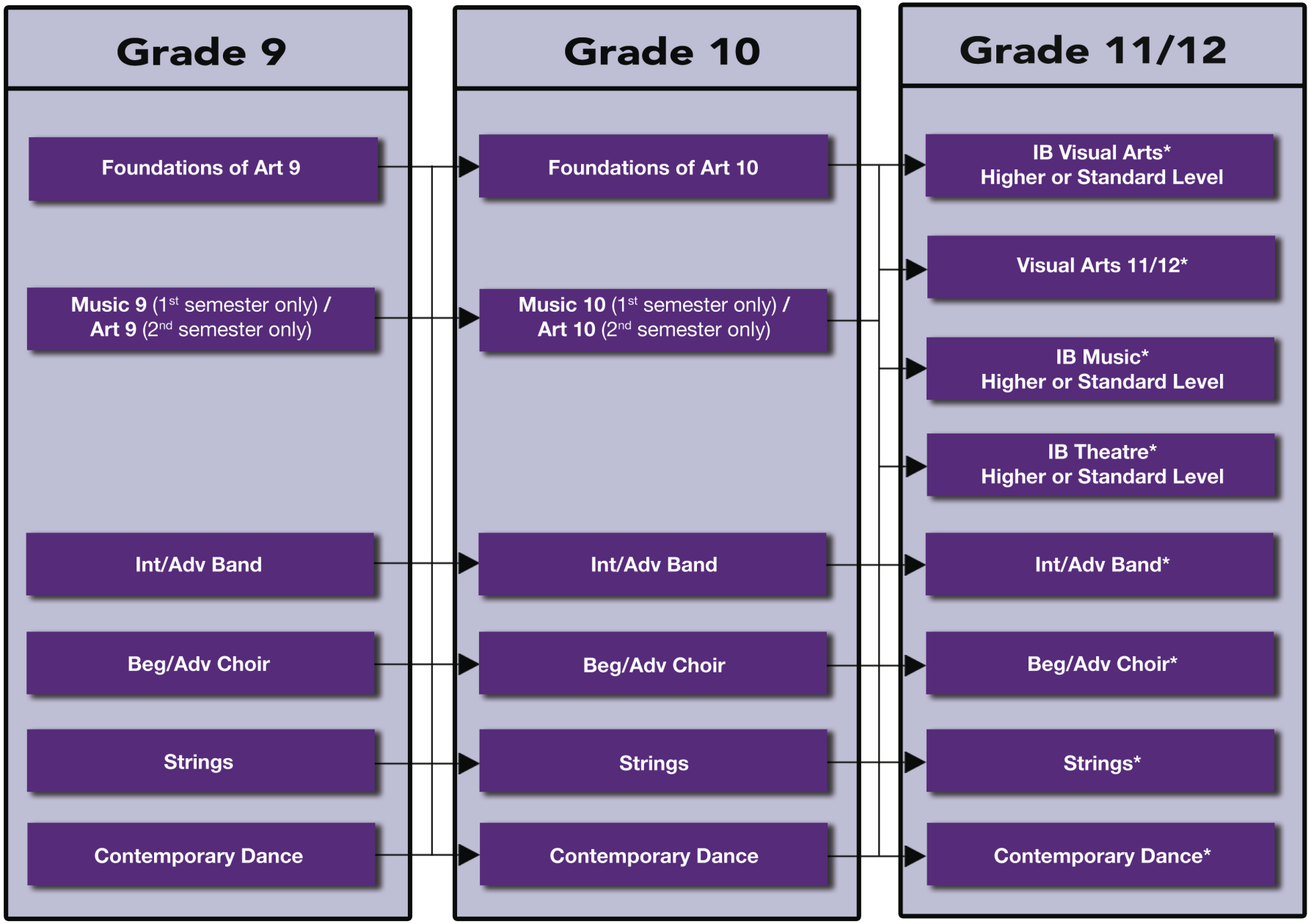
current ethical and moral issues.

Theory of Knowledge (TOK)

Prerequisite: English 10

What is a life well-lived? How are we to judge? How do we really know something? When is belief justified? How is truth manipulated? What makes a truly successful human being? Are there moral obligations that come with knowledge? Is there an underlying order to the universe? How is knowledge best pursued in life and what really makes it worthwhile? These questions are the root curriculum of the Theory of Knowledge class. TOK is the culmination of the International Baccalaureate curriculum and at the center of the program. Students can take the time to ask the more probing questions about knowledge and about learning. In TOK, students are asked to examine truthfully what kinds of thinkers they are becoming, and where they might go from here. The IB Extended Essay is also presented, discussed, initiated and refined in the first semester of TOK. The course starts the second semester of Grade 11 following Junior Seminar and finishes at the end of the first semester of Grade 12.

Visual and Performing Arts



*Students can opt to double up in another core subject area instead if it fits into their schedule.

Visual and Performing Arts

Music 9 (1st Semester Only)
Prerequisite: None

Music 9 provides an awareness of musical styles manifested through the study of music according to four broad periods of music literature: The Middle Ages, The Renaissance, The Baroque and The Classical era. The study of music literature includes musical scores to combine visual perception with auditory, and enables students to see in detail aspects of musical construction.

Visual Art 9 (2nd Semester Only)
Prerequisite: None

This course develops from the Middle School course and seeks to build on the foundations laid in grade 6, 7, and 8. Students continue to gain exposure to a wide variety of techniques and media and are encouraged to achieve a sense of personal satisfaction and discovery. They gain further confidence in their own abilities to communicate and express feelings through non-verbal means of Art/Design and to fulfill their creative potential. The course intends to develop art skills even for just a semester and to hone their artistic abilities in creating paintings, sculptures and prints.

Foundations of Art 9
Prerequisite: None

The Grade 9 Visual Arts Full- Year Course targets students who have the interest, the aptitude and the talent for the Visual Arts. The course intends to develop art-rendering skills in observational drawing using various techniques. Enhanced drawing skills as basis for concept building will be further applied in printmaking; painting; mix media and three-dimensional work. Skills using various media will be extended in preparation for a more rigorous program in the Grade 10-Foundations of Art, which is designed to prepare students for IB Visual Arts. The whole year program will provide the students focused, in-depth and more substantial learning in the Visual Arts as compared to the semester program.

The course is multidisciplinary in approach. While production is the central activity, students will be exposed to the elements and principles of design as applied to art analysis. Fundamental art vocabulary and theories will be the basis for discussion and written work. Relevant field trips, exposure to exhibits and forms of visual expression are included to augment learning inside the classroom. Students taking this course are expected to be more skilled to take Foundations of Art in the next level and consequently, the IB Visual Arts program in Grades 11 and 12.

Beginner's Choir 9, 10, 11 and 12
Prerequisite: None

This course is an introduction to vocal techniques and develops comprehensive musicianship through four areas namely: voice, theory, sight-reading and performance.

Advanced Choir 10, 11 and 12
Prerequisite: Beginner's Choir and teacher recommendation.

This course is designed for students interested in developing the fundamentals of good choral singing. Effort is made for students to gain lasting enjoyment, understanding and appreciation

of music. Students discover how to work effectively with others and appreciate the importance of each individual to the success of the group. Primary techniques of vocal production are taught and practiced. The repertoire is drawn from a variety of periods and styles.

Strings 9, 10, 11 and 12
Prerequisite: Previous orchestra instruction.

This instrumental course aims to encourage students to further develop as orchestra musicians. Instruction is offered in an orchestra course environment and students are encouraged to attend remedial studies and/or have a private instrumental tutor. An audition is required for entrance into this program. At this level, students are expected to own an instrument. Various orchestra repertoires include solo material and chamber music literature. The school supplies these resources.

Intermediate Band 9, 10, 11 and 12
Prerequisite: Previous band instruction.

This class caters for intermediate wind and percussion players. Instruction is offered in a band course environment, students, however, are encouraged to study privately as well. Students with advanced skills coming from the previous year's band program will be given priority entrance into the course as well as the use of school owned instruments. Students, however, are generally expected to own their own instrument. Students will be introduced to grade 2-3 concert band literature as well as some solo and small ensemble material. Concert attire of the director's choice will be required.

Advanced Band 10, 11 and 12
Prerequisite: Previous band instruction. Audition and teacher recommendation.

This course aims to encourage students to further develop as instrumentalists. Instruction is offered in a band course environment and students are expected to attend remedial studies and/or have a private instrumental tutor. Students will be introduced to Grade 2-5 repertoire for various musical groupings (chamber music, concert band repertoire and solo material). The school supplies these resources.

Music 10 (2nd Semester Only)
Prerequisite: None

This course points out the prominent and distinctive characteristics of the 19th and 20th century styles. An in-depth integrated study of the harmony, rhythm, new forms and styles will be undertaken in singing, listening, composing and performing music.

Visual Art 10 (1st Semester Only)
Prerequisite: None

This course develops from the Grade 9 course and is designed for students of all levels of interest and ability in art and design. Students continue to gain exposure to a wide variety of techniques and media and to achieve a sense of personal satisfaction and discovery. Their technical abilities and the capacity to communicate and express ideas and feelings are further extended. This course is a more general course than Foundation 10 Art. Students who take a semester of art can continue to study Non IB Art in Grades 11 and 12. If they wish to study IB Art in Grade 11 it is strongly advised for students to select Foundations of Art at the Grade 10 level.

Foundations of Art 10
Prerequisite: Foundations of Art 9

This course develops from the Grade 9 course, and is designed for students who have strong interest and a high level of ability in art. The purpose of the course is to prepare students for the International Baccalaureate art program, both standard and higher levels.

Students continue to gain exposure to a wide variety of techniques, media, and are encouraged to achieve a sense of personal satisfaction and discovery. The focus of the course is to develop the students' capacity to communicate, explore and express ideas through applying the creative process. Interest and curiosity concerning art from the historical, cultural, aesthetic, social, and psychological perspectives are encouraged. There is also an extensive research and written component to this course based on IB criteria.

IB Music, Higher Level / Standard Level
Prerequisite: Grade 10 Music and previous experience either Choir, Band, Strings is required.

IB Music students will develop appropriate skills in the three musical activities: listening, performing (solo and/or group) and creating (composing). Student's should come already with the following abilities: read music, knowledge of music theory to Grade 2 Level, and ability to play an instrument minimum Grade 4 Level.

Students will learn to analyze music, identifying structure and the way each element is employed. They will learn to contextualize music through identification of stylistic features and they will develop the necessary musical vocabulary to discuss, analyze, and hypothesize on the music they hear.

Students are expected to take private lessons on their chosen instrument and to attend separate lessons or remedials to develop their understanding of music theory.

The course includes musical perception and analysis (individual and/or group) performance and composition. Students are also expected to undertake independent research for the "musical links investigation". (Adopted from IB Music Subject Guide)

IB Theatre, Higher Level / Standard Level
Prerequisite: English Literature 10 and teacher recommendation.

The Theatre Arts program is designed to encourage students to examine theatre in its diversity of forms around the world. This will be achieved through a critical study of the theory, history and culture of theatre, and will find expression through workshopping, devised work and scripted performance. Students will come to understand that the act of imagining, creating, presenting and critically reflecting on theatre in its past and present contexts embodies the individual and social need to investigate and find explanation for the world around us. The program emphasizes the importance of working individually ands a member of an ensemble. Students are encouraged to develop organizational and technical skills needed to express themselves creatively in Theatre. A further emphasis on helping the students become aware of their own perspectives and biases and to learn to respect those of others. As a result, this course can become a way for students to celebrate the international and intercultural dynamic that inspires and sustains contemporary theatre.

IB Visual Art, Higher Level / Standard Level

Prerequisite: Foundations of Art 10

The IB Visual Arts course is designed to enable students to experience visual arts on a personal level and achievement in this subject is reflected in how students demonstrate the knowledge they have gained as well as the skills and attitudes they have developed that are necessary for studying visual arts. The students' individual abilities to be creative and imaginative and to communicate in artistic form will be developed and extended through the theoretical and practical content of the visual arts course.

The course provides a relevant learning opportunity for a diverse range of students as it lays an appropriate foundation for further study. By instilling discipline and refining creative communication and collaborative skills, it offers a valuable course of study for students who may wish to pursue a career or further education studies in areas unconnected to the arts.

The syllabus starting 2014 with first examinations on 2016 will have three components: Visual Arts in Context; Visual Arts Methods and Communicating Visual Arts. These core areas, which have been designed to fully interlink with the assessment tasks are central to the course. Students are required to understand the relationship between these areas and how each area informs and impacts their work in the visual arts.

Difference between SL and HL

The visual arts syllabus demonstrates a clear distinction between the course at SL and at HL, with additional assessment requirements at HL that allow for breadth and greater depth in the teaching and learning. The assessment tasks require HL students to reflect on how their own work has been influenced by exposure to other artists and for them to experiment in greater depth with additional art-making media, techniques and forms. HL students are encouraged to produce a larger body of resolved works and to demonstrate a deeper consideration of how their resolved works communicate with a potential viewer.

Assessment for both HL and SL will include the following:

A. External Assessment
   1. Comparative study –
      Analysis and comparison of different works by different artists (20%)
   2. Process Portfolio-
      Submission carefully selected materials, which reflect experimentation, exploration, manipulation and refinement of a variety of visual arts activities during the two-year course in two-dimensional, three-dimensional and digital art forms. (40%)

B. Internal Assessment
   Exhibition- Students submit for assessment a selection of resolved artworks from their exhibition that show evidence of technical accomplishments during the visual arts course and an understanding of the use of materials, ideas and practices appropriate to visual communication. (40%)

   SL- 4-7 pieces with exhibition text for each and a 400 word curatorial explanation
   HL- 8-11 pieces with exhibition text for each and a 700 word curatorial explanation

   Reference - IB Visual Arts Guide First Examination 2016 (Pre-Publication)

Visual Arts 11
Prerequisite: None

This is a practical course for grade 11 students who wish to have an exposure to the visual arts but who are not committed to the written component of IB. Students have the opportunity to develop an Art folio. The course is very structured with units of drawing, painting, printmaking, design and sculpture.

Visual Arts 12
Prerequisite: None

This is a practical course for grade 12 students who wish to have an exposure to the visual arts but who are not committed to the written component of IB. Students have the opportunity to develop an Art folio. The course is very structured with units of drawing, painting, printmaking, design and sculpture.

Contemporary Dance 9-12
Prerequisite: None

This course is designed to give students the opportunity to develop their dance potential in an environment dedicated to the highest artistic standards.

The goal is to train dancers as well-rounded performers and scholars with a technical emphasis on modern dance, jazz and ballet. Coursework includes: technique classes, history and theory, improvisation, composition, production and performance.

Learning Outcomes
- Physical proficiency in and conceptual understanding of dance technique
- Understanding of choreographic craft and personal style
- Broad knowledge of the practice, theory, history and production of dance
- Stylistically versatile performance skills
- Critical thinking skills
- Capacity for self-reflection and integration of diverse knowledge areas
- Rigorous work ethic and self-discipline
- Awareness of personal artistic direction
- Sense of self and inner direction

Enrollment is limited, ensuring adequate personal attention is given to each student.

Performance Opportunity
All Contemporary Dance students are required to perform in at least two school dance concerts, or musical theatre productions as determined by the dance faculty. There will be (1) one "Open House" or "Dance Lab" (laboratory) each semester.

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