

## 2024 - IB SUBJECT SELECTION HANDBOOK



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### **IB Diploma Fee**

This fee is regulated by the Queensland Department of Education and supports cost of delivery of the International Baccalaureate Program and its assessment.

**IB Diploma Fee includes the Student Resource Scheme (SRS)**

### **Student Resource Scheme (SRS)**

Includes:

School Diary, hat (on enrolment) and ID Card

Student and subject resources where the core curriculum is extended through provision of practical learning experiences and materials eg. Art and craft supplies, cooking materials, Manual Arts materials, Junior HPE.

Textbooks (hard copy, digital or E-Book, Student reference material for hire / purchase (eg. Books, audio / video, software, site licences, consumables, photocopying, use of equipment).



### **Subject Fees**

Subject fees for additional resources not covered by SRS eg. Materials to make items and take home, use of specialised equipment, subject specific activities and consumables.

Also includes items students keep eg. Training T-Shirts for Sporting Excellence Programs, aprons for Hospitality etc.



### **User Pays**

These fees are paid to a third-party provider, and will be charged as the activity occurs throughout the year.

Charges for excursions and activities, transport and admission costs, Teacher relief (if applicable) eg. Sport and Enrichment activities, Guest speakers, Arts Council etc.

## YEAR 11 AND 12 IBDP SUMMARY

IB Core Fees	Subject Fee	User Pays Fee
Creativity Activity Service, Extended Essay, Theory of Knowledge	Yr 11: Nil Yr 12: Nil	Yr 11: \$315 Yr 12: \$49

Group 1 Subjects	Subject Fee	User Pays Fee
English A: Literature HL/SL	Yr 11: Nil Yr 12: Nil	Yr 11: \$75 Yr 12: \$70

Group 2 Subjects	Subject Fee	User Pays Fee
Japanese Ab Initio SL	Yr 11: Nil Yr 12: Nil	Yr 11: \$50 Yr 12: \$50
Spanish Ab Initio SL	Yr 11: Nil Yr 12: Nil	Yr 11: \$50 Yr 12: \$50
Spanish B HL/SL	Yr 12: Nil	Yr 12: \$50
Other Languages B HL/SL (Yr 12)	\$200	Yr 12: Nil

Group 3 Subjects	Subject Fee	User Pays Fee
Psychology HL/SL	Yr 11: Nil Yr 12: Nil	Yr 11: Nil Yr 12: Nil
Environmental Systems and Societies SL	Yr 11: Nil Yr 12: Nil	Yr 11: \$115 Yr 12: Nil
History HL/SL	Yr 11: Nil Yr 12: Nil	Yr 11: Nil Yr 12: Nil
Business Management HL/SL	Yr 11: Nil Yr 12: Nil	Yr 11: \$85 Yr 12: \$85

Group 4 Subjects	Subject Fee	User Pays Fee
Environmental Systems and Societies SL	Yr 11: Nil Yr 12: Nil	Yr 11: \$27 Yr 12: Nil
Physics HL/SL	Yr 11: Nil Yr 12: Nil	Yr 11: \$80 Yr 12: Nil
Chemistry HL/SL	Yr 11: Nil Yr 12: Nil	Yr 11: Nil Yr 12: Nil
Biology HL/SL	Yr 11: Nil Yr 12: Nil	Yr 11: Nil Yr 12: Nil
Computer Science HL/SL	Yr 11: \$Nil Yr 12: NA	Yr 11: \$Nil Yr 12: N/A

Group 5 Subjects	Subject Fee	User Pays Fee
Mathematics - Analysis & Approaches HL/SL	Nil	Nil
Mathematics - Applications & Interpretations SL	Nil	Nil

Group 6 Subjects	Subject Fee	User Pays Fee
Music HL/SL	Yr 11: \$50 Yr 12: \$50	Yr 11: \$65 Yr 12: \$65
Visual Art HL/SL	Yr 11: \$100 Yr 12: \$100	Yr 11: \$30 Yr 12: \$75
Theatre HL/SL	Yr 11: Nil Yr 12: Nil	Yr 11: \$75 Yr 12: \$75

***Being a balanced, holistic, multi-disciplinary program with global perspectives, the IBDP has certain subject selection criteria, as follows:***

- ***Students must study a subject from each of Groups 1 - 5.***
- ***A student may choose a Group 6 subject, OR a second subject in either Group 3 or Group 4. (Subject to numbers)***
- ***A student may alternatively choose two Group 6 (Arts) subjects if they choose Environmental Systems and Society as both their Group 3 & Group 4 subject (ESS is an interdisciplinary subject that meets the criteria for both groups.)***

<b>Subject name</b>	<b>Creativity Activity Service (CAS)</b>
<b>Subject code</b>	COR
<b>Subject fee</b>	Yr 11: Nil Yr 12: Nil
<b>User pays fee (To be invoiced prior to each activity)</b>	Included in IB Core Fees (TOK, CAS, EE) Yr 11: \$315 (IB Camp) Yr 12: \$49
<b>Prerequisites</b>	Creativity Activity and Service (CAS) is compulsory for all Diploma Programme students
<b>Course overview</b>	<p>CAS is at the heart of the Diploma Programme. It is one of the three essential elements in every student’s Diploma Programme experience. It involves students in a range of activities alongside their academic studies throughout the Diploma Programme. The three strands of CAS are characterised as followed:</p> <ul style="list-style-type: none"> <li>• Creativity: arts and other experiences that involve creative thinking</li> <li>• Activity: physical exertion contributing to a healthy lifestyle</li> <li>• Service: an unpaid and voluntary exchange that has a learning benefit</li> </ul> <p>Each student is to complete a personal programme of CAS spread across all three areas. However, the most important part of the CAS programme is the self-evaluation and reflection by the student. Students will be guided through the CAS stages (investigation, preparation, activity, reflection and demonstration).</p> <p>Each student will undertake a CAS project of at least one month’s duration that challenges them to show initiative, demonstrate perseverance and develop skills such as collaboration, problem-solving and decision-making. The CAS project can address any single strand of CAS, or combine two or all three strands.</p>
<b>Assessment</b>	Completion of CAS programme and the CAS journal including goal setting, planning, evaluation stages and reflective writing on MANAGEBAC. Students can begin the CAS programme at the beginning of year 11 and complete by Term 3, year 12.

<b>Subject name</b>	<b>Extended Essay (EE)</b>
<b>Subject code</b>	Embedded in COR
<b>Subject fee</b>	Yr 11: Nil Yr 12: Nil
<b>User pays fee (To be invoiced prior to each activity)</b>	Included in IB Core Fees (TOK, CAS, EE) on page 3
<b>Prerequisites</b>	The Extended Essay is compulsory for all Diploma Programme students.
<b>Course overview</b>	<p>The extended essay is an in-depth study of a focused topic chosen from one of the student's six chosen subjects. Alternatively, students can choose to pursue the World Studies Extended Essay combining two subjects to investigate an inter-disciplinary theme. It is intended to promote high-level research and writing skills, intellectual discovery and creativity. It provides students with an opportunity to engage in personal research in a topic of their own choice under the guidance of a supervisor. This leads to a major piece of formally presented, structured writing.</p> <p>The extended essay is presented as a formal piece of scholarship containing up to 4,000 words and is the result of approximately 40 hours of work by the student.</p>
<b>Course outline</b>	<p><b>Year 11</b> Students will select a subject area and topic for their extended essay Students will be assigned a supervisor and have first formal meeting Students will begin research and investigation of their chosen topic</p> <p><b>Year 12</b> Submit draft to supervisor after second formal meeting Submit final copy including essay, bibliography and researcher reflection form Viva voce meeting to conclude experience</p>
<b>Assessment</b>	The EE is marked externally against set criteria by an IBO examiner. In conjunction with Theory of Knowledge, students are awarded between 0 and 3 bonus points.

<b>Subject name</b>	<b>Theory of Knowledge (TOK)</b>
<b>Subject code</b>	TOK
<b>Subject fee</b>	Yr 11: Nil Yr 12: Nil
<b>User pays fee (To be invoiced prior to each activity)</b>	Included in IB Core Fees (TOK, CAS, EE) on page 3
<b>Prerequisites</b>	TOK (Theory of Knowledge) is compulsory for all Diploma Programme students
<b>Course overview</b>	TOK is an interdisciplinary requirement intended to stimulate critical reflection on the knowledge gained inside and outside the classroom. The course challenges candidates to question the basis of knowledge, to be aware of subjective and ideological biases and to develop the ability to analyse evidence that is expressed in rational argument.
<b>Course outline</b>	<p>The TOK curriculum is made up of three deeply interconnected parts.</p> <p><b>The core theme—Knowledge and the knower:</b> This theme encourages students to reflect on themselves as knowers and thinkers, and to consider the different communities of knowers to which we belong.</p> <p><b>Optional themes:</b> This element provides an opportunity to take a more in-depth look at two themes of particular interest to teachers and students. The given themes all have a significant impact on the world today and play a key role in shaping people’s perspectives and identities. Teachers select two optional themes from a choice of five: knowledge and technology; knowledge and language; knowledge and politics; knowledge and religion; and knowledge and indigenous societies.</p> <p><b>Areas of knowledge:</b> The areas of knowledge (AOK) are specific branches of knowledge, each of which can be seen to have a distinct nature and sometimes use different methods of gaining knowledge. In TOK, students explore five compulsory areas of knowledge: history; the human sciences; the natural sciences; mathematics; the arts.</p>
<b>Assessment</b>	<p>Candidates will complete some formative or practice pieces reflecting the requirements of the IBO during the entire course. Assessment mandated by the IBO is as follows:</p> <p><b>Internal Assessment</b> TOK Exhibition. Students create an exhibition demonstrating how TOK manifests in the world around them.</p> <p><b>External Assessment</b> Essay on a Prescribed Title (1200 - 1600 words)</p>



## GROUP 1 SUBJECTS

<b>Subject name</b>	<b>English A: Language &amp; Literature HL/SL</b>
<b>Subject code</b>	LAH / LAS
<b>Subject fee</b>	Yr 11: Nil Yr 12: Nil
<b>User pays fee (To be invoiced prior to each activity)</b>	Yr 11: \$75 (excursion) Yr 12: \$70 (excursion)
<b>Course overview</b>	<p>English A: Language &amp; Literature is a pre-university course covering various types of literary and non-literary texts. It encourages independent, original, critical and clear thinking, a respect for the imagination and a perceptive approach to understanding language forms and literary works. Candidates develop both written and oral expression through the study of a range of works from different periods and cultures, and of different genres, styles and contexts.</p> <p>Candidates will learn the skills and knowledge required to discuss and appreciate language and literature within a global context. The course objectives include:</p> <ul style="list-style-type: none"> <li>• Knowing, understanding and interpreting literature and non-literary texts</li> <li>• Analysing and evaluating literature and non-literary texts</li> <li>• Communicating effectively</li> </ul>
<b>Course outline</b>	<p>Areas of Exploration</p> <p>Readers, Writers and texts: Works are chosen from a range of literary forms. Students explore how readers respond to texts with a focus on personal and critical responses.</p> <p>Time and space: Students study works from a range of historical and cultural perspectives.</p> <p>Intertextuality: <i>Connecting texts</i>: Students make comparisons between and critically respond to texts by considering connections between form, thematic concerns, topics and literary traditions.</p>
<b>Assessment</b>	<p>Candidates will complete regular formative or practice pieces reflecting the requirements of the IBO during the entire course. Assessment mandated by the IBO is as follows:</p> <p>Internal Assessment: Oral Commentary: students present a formal oral commentary on two extracts that are connected by a global issue. At the conclusion of the 10 minute commentary, the candidate will answer subsequent questions posed by the teacher.</p> <p><b>External Assessment</b></p> <ul style="list-style-type: none"> <li>• Paper 1 Exam – Guided textual analysis on two unseen non-literary extracts</li> <li>• Paper 2 Exam– Comparative essay on two literary works in response to a question.</li> <li>• Higher Level Essay (HL only) – Students are required to write a formal essay on a line of inquiry related to a chosen work.</li> </ul>

## GROUP 2 SUBJECTS

<b>Subject name</b>	<b>Japanese Ab Initio SL</b>
<b>Subject code</b>	JAI
<b>Subject fee</b>	Yr 11: Nil Yr 12: Nil
<b>Use pays fee (To be invoiced prior to each activity)</b>	Yr 11: \$50 Yr 12: \$50
<b>Course overview</b>	<p>The main emphasis of Japanese ab initio is on language acquisition and usage required for purposes and situations in everyday social interaction. Candidates will develop an awareness of the relationship between language and culture. Their appreciation of different cultural perspectives will be enhanced by studying this course, thereby promoting internationalism.</p> <p>Language ab initio is a language acquisition course designed for students with no prior experience of the target language, or for those students with very limited previous exposure.</p>
<b>Course outline</b>	<p>Five prescribed themes are common to the syllabuses of language ab initio:</p> <ul style="list-style-type: none"> <li>• identities</li> <li>• experiences</li> <li>• human ingenuity</li> <li>• social organization</li> <li>• sharing the planet.</li> </ul>
<b>Assessment</b>	<p>Candidates will complete regular formative or practice pieces reflecting the requirements of the IBO during the entire course. Assessment mandated by the IBO is as follows:</p> <p><b>External Assessment</b></p> <ul style="list-style-type: none"> <li>• Paper 1 (productive skills) One writing task from a choice of three.</li> <li>• Paper 2 (receptive skills) Separate sections for listening and reading.</li> </ul> <p>Total of 75%</p> <p><b>Internal Assessment</b></p> <ul style="list-style-type: none"> <li>• Internal individual oral assessment - 25%</li> </ul>

<b>Subject name</b>	<b>Spanish Ab Initio SL</b>
<b>Subject code</b>	SPI
<b>Subject fee</b>	Yr 11: Nil Yr 12: Nil
<b>Use pays fee (To be invoiced prior to each activity)</b>	Yr 11: \$50 Yr 12: \$50
<b>Course overview</b>	<p>The main emphasis of Spanish ab initio is on language acquisition and usage required for purposes and situations usual in everyday social interaction. Spanish ab initio aims to develop a variety of linguistic skills, and a basic awareness of the multiple cultures, origins and countries in the Hispanic world using the language. In accordance with the ethos of multiculturalism and internationalism encouraged by both the IBO and Mountain Creek State High School, Spanish will provide the opportunity for enjoyment, creativity and intellectual stimulation through knowledge of the Spanish language.</p> <p>There is the opportunity for candidates with a higher competency in Spanish to study Spanish B at a higher level. This will be by invitation only.</p>
<b>Course outline</b>	<p>Five prescribed themes are common to the syllabuses of language ab initio:</p> <ul style="list-style-type: none"> <li>• identities</li> <li>• experiences</li> <li>• human ingenuity</li> <li>• social organization</li> <li>• sharing the planet.</li> </ul>
<b>Assessment</b>	<p>Candidates will complete regular formative and practice assessments reflecting the requirements of the IBDP during the entire course. Assessment mandated by the IBO is as follows:</p> <p><b>External Assessment</b></p> <ul style="list-style-type: none"> <li>• Paper 1 (productive skills) One writing task from a choice of three.</li> <li>• Paper 2 (receptive skills) Separate sections for listening and reading.</li> </ul> <p>Total of 75%</p> <p><b>Internal Assessment</b></p> <ul style="list-style-type: none"> <li>• Internal individual oral assessment - 25%</li> </ul>

## GROUP 3 SUBJECTS

<b>Subject Name</b>	<b>Psychology HL/SL</b>
<b>Subject code</b>	PSH / PSS
<b>Subject fee</b>	Yr 11: Nil Yr 12: Nil
<b>Use pays fee (To be invoiced prior to each activity)</b>	Yr 11: Nil Yr 12: Nil
<b>Prerequisites</b>	Nil
<b>Course overview</b>	Psychology is the study of behaviour and mental processes. IB psychology aims to develop an awareness of how psychological research can be applied for the benefit of people, understand alternative explanations for behaviour, learn about psychological injury and most broadly to develop an understanding of the biological, cognitive and sociocultural influences on human behaviour. Understanding how psychological knowledge is generated, developed and applied, enables students to achieve a greater understanding of themselves and appreciate the diversity of human behaviour.
<b>Course outline</b>	<p><b>Year 11-12</b></p> <p><b>Core</b></p> <ul style="list-style-type: none"> <li>• The biological level of analysis</li> <li>• The cognitive level of analysis</li> <li>• The sociocultural level of analysis</li> </ul> <p><b>Options</b></p> <ul style="list-style-type: none"> <li>• Abnormal Psychology</li> <li>• Developmental Psychology</li> <li>• Health Psychology</li> <li>• Psychology of human relationships</li> <li>• Qualitative and Quantitative Research Methodology HL</li> <li>• Simple Experiential Study SL/HL</li> </ul>
<b>Assessment</b>	<p>The assessment mandated by the IBO is as follows:</p> <p><b>Internal Assessment</b> Experimental Study and report</p> <p><b>External Assessment</b> Paper 1 - Assesses knowledge in the Core using medium and long response questions Paper 2 - Assesses knowledge from 1 or 2 of the option topics depending on SL/HL Paper 3 - HL only: short and medium written responses to questions</p>

<b>Subject name</b>	<b>Environmental Systems and Societies (ESS) – Standard Level</b>
<b>Subject code</b>	ESS
<b>Subject fee</b>	Yr 11: Nil Yr 12: Nil
<b>Use pays fee (To be invoiced prior to each activity)</b>	Yr 11: \$115 Yr 12: Nil
<b>Course overview</b>	<p>Environmental Systems and Societies is an interdisciplinary subject and it satisfies the requirements for both circle Groups 3 and 4. This subject is offered at Standard Level only.</p> <p>The prime intent of this course is to provide students with a coherent perspective on the interrelationships between environmental systems and societies; one that enables them to adopt an informed personal response to the wide range of pressing environmental issues that they will inevitably come to face. It is intended that candidates develop a sound understanding of these interrelationships, rather than a purely journalistic appreciation of environmental issues.</p>
<b>Course outline</b>	<p>Students cover the following topics across the two-year Diploma Program</p> <ul style="list-style-type: none"> <li>• Foundations of environmental systems and societies</li> <li>• Ecosystems and ecology</li> <li>• Biodiversity and conservation</li> <li>• Water and aquatic food production systems and societies</li> <li>• Soil systems and terrestrial food production</li> <li>• Atmospheric systems and societies</li> <li>• Climate change and energy production</li> <li>• Human systems and resource use</li> </ul>
<b>Assessment</b>	<p>Candidates will complete regular formative or practice pieces reflecting the requirements of the IBO during the entire course. Assessment mandated by the IBO is as follows:</p> <p><b>Internal Assessment</b> Individual investigation to focus on particular aspect of an ESS issue within a broad environmental and societal context. Written report 1500 – 2250 words.</p> <p><b>External Assessment</b> Paper 1 – Case Study Paper 2 – Short answer and extended written responses</p>

<b>Subject name</b>	<b>History HL/SL</b>
<b>Subject code</b>	HYH / HYS
<b>Subject fee</b>	Yr 11: Nil Yr 12: Nil
<b>Use pays fee (To be invoiced prior to each activity)</b>	Yr 11: Nil Yr 12: Nil
<b>Course overview</b>	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.
<b>Course outline</b>	<p><b>Year 11</b> Authoritarian States Historical Investigation – Student choice of topic Cold War</p> <p><b>Year 12</b> The French Revolution and Napoleon (1774-1815) Imperial Russia, revolution and the establishment of the Soviet Union (1855-1924) Versailles to Berlin: Diplomacy in Europe (1919-1945) – student led</p>
<b>Assessment</b>	<p>Candidates will complete regular formative or practice pieces reflecting the requirements of the IBO during the entire course. Assessment mandated by the IBO is as follows:</p> <p><b>Internal Assessment</b> Historical Investigation</p> <p><b>External Assessment</b> Paper 1 – Source Based paper Paper 2 - 2 Essay Responses Paper 3 (HL only) - 3 Essay Responses</p>

<b>Subject name</b>	<b>Business and Management HL/SL</b>
<b>Subject code</b>	BMS
<b>Subject fee</b>	Yr 11: Nil Yr 12: Nil
<b>Use pays fee (To be invoiced prior to each activity)</b>	Yr 11: \$85 Yr 12: \$85
<b>Course overview</b>	The IBO Business and Management programme is designed to give students an understanding of business principles, practices and skills. Candidates should also appreciate the ethical concerns and social responsibility in the business environment. Finally, candidates should be able to make sense of the forces and circumstances that drive change in an interdependent and multicultural world.
<b>Course outline</b>	<p><b>Year 11 and Year 12</b></p> <ul style="list-style-type: none"> <li>• Business Organisation and Environment</li> <li>• Human Resource Management</li> <li>• Finance and Accounts</li> <li>• Marketing</li> <li>• Operations Management</li> </ul>
<b>Assessment</b>	<p>Candidates will complete a regular formative or practice pieces reflecting the requirements of the IBO during the entire course. Assessment mandated by the IBO is as follows:</p> <p><b>Internal Assessment</b> Written Commentary about a real issue or problem facing a particular organisation (SL) Research Project that addresses an issue facing an organisation or analyses a decision to be made by an organisation (HL)</p> <p><b>External Assessment</b> Paper 1 - Exam based on a pre-seen Case Study Paper 2 - Extended Response</p>

## GROUP 4 SUBJECTS

<b>Subject name</b>	<b>Environmental Systems and Societies (ESS) – Standard Level</b>
<b>Subject code</b>	ESS
<b>Subject fee</b>	Yr 11: Nil Yr 12: Nil
<b>Use pays fee (To be invoiced prior to each activity)</b>	Yr 11: \$27 Yr 12: Nil
<b>Course overview</b>	<p>Environmental Systems and Societies is an interdisciplinary subject and it satisfies the requirements for both circle Groups 3 and 4. This subject is offered at Standard Level only.</p> <p>The prime intent of this course is to provide students with a coherent perspective on the interrelationships between environmental systems and societies; one that enables them to adopt an informed personal response to the wide range of pressing environmental issues that they will inevitably come to face. It is intended that candidates develop a sound understanding of these interrelationships, rather than a purely journalistic appreciation of environmental issues.</p>
<b>Course outline</b>	<p><b>Year 11 and Year 12</b></p> <ul style="list-style-type: none"> <li>• Foundations of environmental systems and societies</li> <li>• Ecosystems and ecology</li> <li>• Biodiversity and conservation</li> <li>• Water and aquatic food production systems and societies</li> <li>• Soil systems and terrestrial food production</li> <li>• Atmospheric systems and societies</li> <li>• Climate change and energy production</li> <li>• Human systems and resource use</li> </ul>
<b>Assessment</b>	<p>Candidates will complete regular formative or practice pieces reflecting the requirements of the IBO during the entire course. Assessment mandated by the IBO is as follows:</p> <p><b>Internal Assessment</b> Individual investigation to focus on particular aspect of an ESS issue within a broad environmental and societal context. Written report 1500 – 2250 words.</p> <p><b>External Assessment</b> Paper 1 – Case Study Paper 2 – Short answer and extended written responses</p>



## Subject Selection Handbook – 2024 Year 11 and Year 12 IBDP

<b>Subject name</b>	<b>Physics HL/SL</b>
<b>Subject code</b>	PHH / PHS
<b>Subject fee</b>	Yr 11: Nil Yr 12: Nil
<b>Use pays fee</b> (To be invoiced prior to each activity)	Yr 11: \$80 Yr 12: Nil
<b>Course overview</b>	Physics is the most fundamental of the experimental sciences as it seeks to explain the universe itself, from the very smallest particles to the vast distances between galaxies, and the behaviour of all objects in between. This course is a mixture of classical Newtonian mechanics, electromagnetism and thermodynamics blended with modern theories which blur the classical picture of predictability in nature within a contextual framework. Practical work, experimentation and group tasks are integral parts of this course of study and contribute to the final assessment.
<b>Course outline</b>	<p>Students cover the following topics across the two-year Diploma Program</p> <p><b>Standard Level Topics</b>            Measurement and uncertainties            Mechanics            Thermal Physics            Waves            Electricity and magnetism            Circular motion and gravitation            Atomic, nuclear and particle physics            Energy production</p> <p><b>Additional Higher Level Topics</b>            Wave Phenomena            Fields            Electromagnetic Induction            Quantum and nuclear physics</p> <p><b>Options Topics</b>            Option A – Relativity            Option B – Engineering physics            Option C – Imaging            Option D- Astrophysics</p> <p>Group 4 Project - this project requires collaboration in the investigation of a topic or problem across all the IB science disciplines offered at the school.</p>
<b>Assessment</b>	<p><b>Internal Assessment</b>            Individual Investigation</p> <p><b>External Assessment</b>            Paper 1 - Multiple Choice            Paper 2 - Short Answer Questions            Paper 3 – Data based questions and Option Topics</p>

<b>Subject name</b>	<b>Chemistry HL/SL</b>																						
<b>Subject code</b>	CHH / CHS																						
<b>Subject fee</b>	Yr 11: Nil Yr 12: Nil																						
<b>User pays fee (To be invoiced prior to each activity)</b>	Yr 11: Nil Yr 12: Nil																						
<b>Course overview</b>	Chemistry is an experimental science that combines academic study with the acquisition of practical and investigative skills. It is called the central science as chemical principles underpin both the physical environment in which we live and all biological systems. Apart from being a subject worthy of study in its own right, Chemistry is a prerequisite for many other courses in higher education, such as medicine, biological science and environmental science, and serves as a useful preparation for employment.																						
<b>Course outline</b>	<p>Students cover the following topics across the two-year Diploma Program</p> <table border="1"> <thead> <tr> <th><b>DP Standard Level topics</b></th> <th><b>DP Higher Level additional topics</b></th> </tr> </thead> <tbody> <tr> <td>Stoichiometric relationships</td> <td>Atomic Structure</td> </tr> <tr> <td>Atomic Structure</td> <td>The Periodic Table – The transition metals</td> </tr> <tr> <td>Periodicity</td> <td>Chemical bonding &amp; structure</td> </tr> <tr> <td>Chemical bonding and structure</td> <td>Energetics/Thermochemistry</td> </tr> <tr> <td>Energetics/Thermochemistry</td> <td>Chemical Kinetics</td> </tr> <tr> <td>Chemical Kinetics</td> <td>Equilibrium</td> </tr> <tr> <td>Equilibrium</td> <td>Acids and Bases</td> </tr> <tr> <td>Acids and Bases</td> <td>Redox processes</td> </tr> <tr> <td>Redox processes</td> <td>Organic Chemistry</td> </tr> <tr> <td>Organic Chemistry</td> <td>Measurement and analysis</td> </tr> </tbody> </table>	<b>DP Standard Level topics</b>	<b>DP Higher Level additional topics</b>	Stoichiometric relationships	Atomic Structure	Atomic Structure	The Periodic Table – The transition metals	Periodicity	Chemical bonding & structure	Chemical bonding and structure	Energetics/Thermochemistry	Energetics/Thermochemistry	Chemical Kinetics	Chemical Kinetics	Equilibrium	Equilibrium	Acids and Bases	Acids and Bases	Redox processes	Redox processes	Organic Chemistry	Organic Chemistry	Measurement and analysis
<b>DP Standard Level topics</b>	<b>DP Higher Level additional topics</b>																						
Stoichiometric relationships	Atomic Structure																						
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Chemical bonding and structure	Energetics/Thermochemistry																						
Energetics/Thermochemistry	Chemical Kinetics																						
Chemical Kinetics	Equilibrium																						
Equilibrium	Acids and Bases																						
Acids and Bases	Redox processes																						
Redox processes	Organic Chemistry																						
Organic Chemistry	Measurement and analysis																						
<b>Course outline continued</b>	<p><b>Options Topics</b> Students will study two options topics                      Option A – Materials OR Option B – Biochemistry OR Option C – Energy OR Option D – Medicinal chemistry                      Group 4 Project - This requires students to collaborate in the investigation of a topic or problem across all of the IB science disciplines offered at this school.</p>																						
<b>Assessment</b>	<p>Candidates will complete regular formative or practice pieces reflecting the requirements of the IBO during the entire course. Assessment mandated by the IBO is as follows:</p> <p><b>Internal Assessment</b>                      Individual Investigation</p> <p><b>External Assessment</b>                      Paper 1 - Multiple Choice                      Paper 2 - Short Answer Questions                      Paper 3 – Data based questions and Option Topics</p>																						

<b>Subject name</b>	<b>Biology HL/SL</b>				
<b>Subject code</b>	BIH / BIS				
<b>Subject fee</b>	Yr 11: Nil Yr 12: Nil				
<b>Use pays fee (To be invoiced prior to each activity)</b>	Yr 11: Nil Yr 12: Nil				
<b>Course overview</b>	There are four basic biological concepts that run throughout the Biology course. These include Structure and Function, Universality Versus Diversity, Equilibrium in Systems and Evolution.				
<b>Course outline</b>	<p>Students cover the following topics across the two-year Diploma Program</p> <table border="1"> <thead> <tr> <th><b>DP Standard Level topics</b></th> <th><b>DP Higher Level additional topics</b></th> </tr> </thead> <tbody> <tr> <td>Cell Biology Molecular Biology Genetics Ecology Evolution and Biodiversity Human Physiology</td> <td>Nucleic Acids Metabolism, Cell Respiration and Photosynthesis Plant Biology Genetics and Evolution Animal Physiology</td> </tr> </tbody> </table> <p><b>Options for SL and HL</b>                      Option A - Neurobiology and Behaviour, or                      Option B - Biotechnology and Bioinformatics, or                      Option C - Ecology and Conservation, or                      Option D – Human Physiology</p> <p>Group 4 Project - This requires students to collaborate in the investigation of a topic or problem across all of the IB science disciplines offered at this school.</p>	<b>DP Standard Level topics</b>	<b>DP Higher Level additional topics</b>	Cell Biology Molecular Biology Genetics Ecology Evolution and Biodiversity Human Physiology	Nucleic Acids Metabolism, Cell Respiration and Photosynthesis Plant Biology Genetics and Evolution Animal Physiology
<b>DP Standard Level topics</b>	<b>DP Higher Level additional topics</b>				
Cell Biology Molecular Biology Genetics Ecology Evolution and Biodiversity Human Physiology	Nucleic Acids Metabolism, Cell Respiration and Photosynthesis Plant Biology Genetics and Evolution Animal Physiology				
<b>Assessment</b>	<p>Candidates will complete regular formative or practice pieces reflecting the requirements of the IBO during the entire course. Assessment mandated by the IBO is as follows:</p> <p><b>Internal Assessment (IA)</b>                      Individual Investigation</p> <p><b>External Assessment</b>                      Paper 1 – Multiple Choice                      Paper 2 – Short Answer Questions                      Paper 3 – Data based questions and Option Topics</p>				

<b>Subject name</b>	<b>Computer Science HL/SL</b>
<b>Subject code</b>	CSH
<b>Subject Fee</b>	Yr 11: \$40 Yr 12: N/A
<b>Use pays fee (To be invoiced prior to each activity)</b>	Yr 11: Nil Yr 12: N/A
<b>Course overview</b>	<p>The IBDP Computer Science course requires an understanding of the fundamental concepts of computational thinking as well as knowledge of how computers and other digital devices operate. The course, under-pinned by conceptual thinking, draws of a wide spectrum of knowledge, and enables and empowers innovation, exploration and acquisition of further knowledge. Students study how computer science interacts with and influences cultures, society and how individuals and societies behave, and the ethical issues involved.</p> <p>During the course the student will develop computational solutions. This will involve the ability to:</p> <ul style="list-style-type: none"> <li>• identify a problem or unanswered question</li> <li>• design, prototype and test a proposed solution</li> <li>• liaise with clients to evaluate the success of the proposed solution and make recommendations for future developments.</li> </ul>
<b>Course outline</b>	<p><b>Core</b> syllabus content and practical work at HL/SL in the following topics:  Topic 1: System fundamentals  Topic 2: Computer organisation  Topic 3: Networks  Topic 4: Computational thinking, problem solving and programming</p> <p><b>HL Topics</b> including practical work as below:  Topic 5: Abstract data structures (23 hours)  Topic 6: Resource management (8 hours)  Topic 7: Control (14 hours)  Case Study: Additional subject content introduced by the annually-issued case study</p> <p><b>Option Topics</b> (one topic from the following):  Option A: Databases  Option B: Modelling and Simulation  Option C: Web science  Option D: Object-oriented programming (OOP)</p>
<b>Assessment</b>	<p>Candidates will complete regular formative and practice pieces reflecting the requirements of the IBDP during the entire course. Assessment mandated by the IBO is as follows:</p> <p><b>Internal Assessment</b>  Solution.  Practical application of skills through the development of a product  Associated documentation.</p> <p><b>External Assessment</b>  Paper 1 - Core Topics  Paper 2 - Option topics  Paper 3 (HL only) - Case Study</p> <p>Group 4 Project - this project requires collaboration in the investigation of a topic or problem across all the IB Science disciplines offered at the school.</p>

<b>Subject name</b>	<b>Mathematical Applications and Interpretations</b>
<b>Subject code</b>	MAI
<b>Subject fee</b>	Yr 11: Nil Yr 12: Nil
<b>User pays fee</b> (To be invoiced prior to each activity)	Yr 11: Nil Yr 12: Nil
<b>Course overview</b>	<p>Applications and interpretation is for students who are interested in developing their mathematics for describing our world and solving practical problems. They will also be interested in harnessing the power of technology alongside exploring mathematical models. Students who take Mathematics: applications and interpretation will be those who enjoy mathematics best when seen in a practical context. This subject is only offered at SL.</p> <p>The IB only approve certain graphic calculators, the school uses CASIO FXCG20AU or FXCG50AU.</p>
<b>Course outline</b>	<p>Mathematics: Applications and interpretation covers topics including:</p> <ul style="list-style-type: none"> <li>Number and algebra</li> <li>Functions</li> <li>Trigonometry and geometry</li> <li>Statistics and probability</li> <li>Calculus</li> </ul>
<b>Assessment</b>	<p>Candidates will complete regular formative or practice pieces reflecting the requirements of the IBO during the entire course. Assessment mandated by the IBO is as follows:</p> <p><b>Internal Assessment</b> Maths Project - This is an individual piece of work on a topic chosen by the student involving one or more areas of mathematics studied in the course.</p> <p><b>External Assessment</b> Both exams allow Graphic Calculator use. Paper 1 Paper 2</p>

## GROUP 5 SUBJECTS

<b>Subject name</b>	<b>Mathematical Analysis and Approaches</b>
<b>Subject code</b>	MAA
<b>Subject fee</b>	Yr 11: Nil Yr 12: Nil
<b>User pays fee (To be invoiced prior to each activity)</b>	Yr 11: Nil Yr 12: Nil
<b>Course overview</b>	<p>Students who choose Mathematics: analysis and approaches at SL or HL should be comfortable in the manipulation of algebraic expressions, and enjoy the recognition of patterns and understand the mathematical generalization of these patterns. Students who wish to take Mathematics: analysis and approaches at higher level will have strong algebraic skills and the ability to understand simple proof. They will be students who enjoy spending time with problems and get pleasure and satisfaction from solving challenging problems.</p> <p>At MCSHS from 2020 onwards, HL will only be offered in this Mathematics subject – Analysis and Approaches.</p> <p>The IB approve certain graphic calculators, the school uses CASIO FXCG20AU or FXCG50AU.</p> <p>A Total of 240 hours is needed to study Mathematics HL therefore candidates of HL are required to attend out of shift teaching sessions (2 hours in addition per week for 2 years).</p>
<b>Course outline</b>	<p>Candidates in HL and SL Mathematics will study the following topics:</p> <ul style="list-style-type: none"> <li>Algebra</li> <li>Functions and Equations</li> <li>Circular Functions and Trigonometry</li> <li>Vectors</li> <li>Statistics and Probability</li> <li>Calculus</li> </ul>
<b>Assessment</b>	<p>Candidates will complete regular formative or practice pieces reflecting the requirements of the IBO during the entire course. Assessment mandated by the IBO is as follows:</p> <p><b>Internal Assessment</b> Mathematical exploration is a piece of written work that involves investigating an area of mathematics.</p> <p><b>External Assessment</b> Paper 1 - No calculator Paper 2 - Graphic calculator essential Paper 3 - HL topics (HL only)</p>

## GROUP 6 SUBJECTS

<b>Subject name</b>	<b>Music HL/SL</b>
<b>Subject code</b>	MCH / MCS
<b>Subject fee</b>	Yr 11: \$50 Yr 12: \$50 (Song Writing Workshop \$30 and Theory book \$20)
<b>User pays fee (To be invoiced prior to each activity)</b>	Yr 11: \$65 Yr 12: \$65
<b>Prerequisites</b>	Entry into IB music will be at the discretion of the HOD Creative Industries and may require an audition
<b>Course overview</b>	The IBO music course is a student-centred course which explores local and global perspectives in music, developing a student's skills in performance, composition, project management and musicology analysis and research. Students work with an instrument/s of their choosing and complete a series of projects which all have a written component, performance component and composition component. The subject requires commitment to consistent rehearsal schedule and students can choose to be supported through private tuition in their instruments.
<b>Course outline</b>	The IBO Music programme is designed for students to embody three roles: a researcher, an experimenter and a performer, while exploring a diverse range of music.
<b>Assessment</b>	<p>Candidates will complete regular formative or practice pieces reflecting the requirements of the IBO during the entire course. Assessment mandated by the IBO is as follows:</p> <p><b>Internal Assessment</b>            Experimenting with Music Report            Contemporary Music Maker Project (HL Only)</p> <p><b>External Assessment</b>            Exploring Music in Context Folio            Presenting Music Folio</p>

<b>Subject name</b>	<b>Visual Art HL/SL</b>
<b>Subject code</b>	VIH
<b>Subject fee</b>	Yr 11: \$100 Yr 12: \$100
<b>User pays fee</b>	Yr 11: \$30 Yr 12: \$75
<b>Prerequisites</b>	For entry into IB Visual Art candidates may be required to present a folio to HOD Creative Industries.
<b>Course overview</b>	<p>The Visual Art syllabus provides a framework that allows teachers to choose content and activities appropriate to both their candidate's interests and experience and their own. Because these factors vary considerably, the precise content is not specified but is generated by the teacher and candidates, in accordance with the aims and assessment objectives, and reflects the distinctive international perspective of the Diploma Programme. This flexibility is one of the distinguishing characteristics of the IB Visual Arts course.</p> <p>An integrated relationship between studio work and investigation work is an essential part of the course. Students are expected to view exhibitions and keep detailed responses to gallery visits. Students may be required to provide further art supplies, depending on their independent project.</p>
<b>Course outline</b>	<p>Year 11 students receive repeated exposure to the types of assessment they will encounter in Year 12. Learning experiences in Year 11 are teacher facilitated, however students gain an increasing amount of freedom to explore their own choice of media within assessment.</p> <p>Year 11 units: Unit 1 - Culture Unit 2 - Colour Unit 3 - Objects Unit 4 - Mentors and Influence</p> <p>Year 12 The Candidate's direction is independently negotiated with the teacher but can cover such media as: Ceramics; Fibre Arts; Photographic Arts; Costume and Stage Design; Graphic Design; Printmaking; Electronic Imaging; Installation: Product Design; Environmental Design; Painting; Sculpture; Performance Art; Video and Film</p>
<b>Assessment</b>	<p>Candidates will complete regular formative or practice pieces reflecting the requirements of the IBO during the entire course. Assessment mandated by the IBO is as follows:</p> <p><b>Internal Assessment</b> Exhibition of artwork Curatorial rationale Exhibition text (title, medium, size and intention of each artwork)</p> <p><b>External Assessment</b> Comparative Study Process portfolio (Digital version of a Visual Art Journal)</p>



<b>Subject name</b>	<b>Theatre HL/SL</b>
<b>Subject code</b>	TAH
<b>Subject fee</b>	Yr 11: Nil Yr 12: Nil
<b>Use pays fee</b> (To be invoiced prior to each activity)	Yr 11: \$75 Live Performance Yr 12: \$75 Live Performance, In-school workshop
<b>Course overview</b>	<p>Theatre is a practical subject that encourages discovery through experimentation and the presentation of ideas to others. It results in the development of both theatre and life skills; the building of confidence, creativity and working collaboratively.</p> <p>The IB Diploma Programme theatre course is a multifaceted theatre-making course of study. It gives students the opportunity to make theatre as creators, designers, directors and performers. It emphasizes the importance of working both individually and collaboratively as part of an ensemble. It offers the opportunity to engage actively in the creative process, transforming ideas into action as inquisitive and productive artists.</p> <p>Students experience the course from contrasting artistic perspectives. They learn to apply research and theory to inform and to contextualise their work. The theatre course encourages students to appreciate theatre as participants and audience members - they gain a richer understanding of themselves, their community and the world.</p> <p>Through the study of theatre, students become aware of their own personal and cultural perspectives, developing an appreciation of the diversity of theatre practices, their processes and their modes of presentation. It enables students to discover and engage with different forms of theatre across time, place and culture.</p>
<b>Course outline</b>	Core areas of study in the IB Theatre programme are inquiring, developing, presenting and evaluating
<b>Assessment</b>	<p>Candidates will complete regular formative or practice pieces reflecting the requirements of the IBO during the entire course. Assessment mandated by the IBO is as follows:</p> <p><b>Internal Assessment</b></p> <p>Collaborative Project – Students collaboratively create and present an original piece of theatre</p> <p><b>External Assessment</b></p> <p>Solo theatre piece (HL only) – Students research a theatre theorist, identify an aspect of their theory and create and present a solo theatre piece based on this theory</p> <p>Production Proposal – Students choose a published play text and develop ideas regarding how it could be staged for an audience</p> <p>Research Presentation – Individual presentation outlining and physically demonstrating academic and practical research into a theatre tradition</p>