THE INTERNATIONAL BACCALAUREATE DIPLOMA PROGRAMME

Description
The IB Diploma is a curriculum framework designed to thoroughly prepare students for university education and beyond. The IB Diploma Programme, with its three subjects at Higher Level and three at Standard Level, requires all students to engage in the study of Languages, Sciences, Mathematics, and Humanities. In addition, the three core components of Theory of Knowledge (ToK), Creativity, Activity and Service (CAS), and the Extended Essay (EE), provide students with additional skills for future study and life balance.

Choosing an IB Diploma Programme
The two year course comprises of six subjects chosen from groups 1-6 as indicated in the table below and the completion of the core of the programme.

At the core of the Diploma Programme are:
- Theory of Knowledge (ToK)
- An Extended Essay (EE) related to curriculum content
- Participation in Creativity, Activity and Service (CAS).

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<thead>
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<th>Group 1</th>
<th>Group 2</th>
<th>Group 3</th>
<th>Group 4</th>
<th>Group 5</th>
<th>Group 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language A - studies in language &amp; literature</td>
<td>Language Acquisition</td>
<td>Individual and Societies</td>
<td>Experimental Sciences</td>
<td>Mathematics</td>
<td>The Arts</td>
</tr>
<tr>
<td>A : literature</td>
<td>B : several years of study only</td>
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<tr>
<td></td>
<td>ab initio: new learner</td>
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</tbody>
</table>

English A: literature HL/SL
Self-taught language A: literature SL only

French ab initio SL only
German B SL only
Indonesian B SL only
English B HL only
or another language from group 1

History HL/SL
Psychology HL/SL
Economics HL/SL
Biology HL/SL
Chemistry HL/SL
Mathematics HL/SL
Mathematical Studies SL only
Film HL/SL
Music HL/SL
Visual Arts HL/SL
or another subject from groups 1-4

There is also the possibility of studying other subjects online or language courses off site. For subjects available online, please see the end of the IB subject listings.

Assessment
The IB grading scale (1 – 7) is used for each subject. Theory of Knowledge and the extended essay are assessed A-E, contributing up to three points towards the Diploma points total. The total score is therefore out of 45. All subjects are externally examined or moderated. All subjects incorporate an internal assessment component, which is externally moderated to ensure that uniform standards are maintained.
IB DIPLOMA CORE SUBJECTS

CREATIVITY, ACTIVITY AND SERVICE (CAS)

Prerequisites: NA
Level: NA
Description: This is a compulsory component of the Diploma Programme.
Aims:
▪ To provide a challenge to each student in the three areas – Creativity, Action and Service.
▪ To provide opportunities for service.
▪ To complement the academic disciplines of the curriculum and to provide balance to the demands of scholarship placed upon the IB student.
▪ To challenge and extend the individual by developing a spirit of discovery, self-reliance and responsibility.
▪ To encourage the development of students’ individual skills and interests.

Content: A student is expected to devote some hours each week to CAS. During the two years of the Diploma Programme time should be distributed between creativity, action and service.

Assessment: Assessment in this aspect of the IB combines self and school evaluations. The nature of each is intended to develop a profile of a student’s commitment to the program and assurances that each section has been met with an appropriate balance.

EXTENDED ESSAY (EE)

Prerequisites: NA
Level: NA
Description: This is a compulsory component of the Diploma Programme. It is an independent research essay.
Aims: The essay is designed to provide candidates with an opportunity to engage in independent research at an introductory level. Emphasis is placed on the process of engaging in personal research and on the communication of ideas and information in a logical and coherent manner. It acquaints students with the independent research and writing skills expected at university.

Content: The choice of subject must be taken from the list of available subjects. It is recommended that the essay be written on a topic from within one of the student’s subjects.
The Extended Essay must include:
▪ Abstract
▪ Introduction
▪ Body (development/method/results)
▪ Conclusion
▪ References and bibliography

Assessment: The essay may be up to but not exceed 4000 words.
All Extended Essays are externally assessed by examiners by the IB against a set of criteria that are the same, regardless of the subject of the essay.

THEORY OF KNOWLEDGE (TOK)

Prerequisites: NA
Level: NA (Course covers 2 years)

Description: This compulsory core component of the Diploma Programme includes a wide range of readings, discussions and activities focusing on (questions of) how we know what we claim to know. Students are encouraged to analyse knowledge claims and explore knowledge questions.

Aims: The aims of the Theory of Knowledge (TOK) program are for students to:
▪ make connections, including between the academic disciplines and the wider world
▪ develop an awareness of how individuals and communities construct knowledge and how this is critically examined
▪ develop an interest in the diversity and richness of cultural perspectives and an awareness of personal and ideological assumptions
▪ critically reflect on their own beliefs and assumptions
▪ understand that knowledge brings responsibility which leads to commitment and action
Content:
Knowers and Knowing
▪ Knowledge Questions
▪ Sources of Knowledge
▪ Justification of Knowledge Claims
▪ Role of personal and shared knowledge
▪ Perspective (own and of others)
▪ Linking Questions (connecting AoKs, WoKs and Knower) and key concepts including belief, certainty, evidence and proofs.

Ways of Knowing (4 of these will be covered in depth (over) during the course)
▪ Language
▪ Sense perception
▪ Emotion
▪ Reason
▪ Imagination
▪ Faith
▪ Intuition

Areas of Knowledge (6 of these will be covered in depth (over) during the course)
▪ Mathematics
▪ Natural Sciences
▪ Human Sciences
▪ The Arts
▪ History
▪ Ethics
▪ Religious knowledge systems
▪ Indigenous knowledge systems

Inquiry into construction of knowledge in the different Areas of Knowledge using Knowledge Frameworks.
▪ Scope motivation and applications
▪ Specific terminology and concepts
▪ Key historical developments
▪ Interaction with personal knowledge

Assessment: There are two final assessment components required by the IBO
▪ One essay (maximum length 1600 words) on any one of the six titles prescribed by the IBO. The essay is externally assessed and carries 67% of the final mark.
▪ One oral presentation of approximately 10 minutes (per student, max. group size 3). The presentation is internally assessed and contributes 33% of the final mark.
Group 1

Language A – studies in language & literature

LANGUAGE A: LITERATURE (ENGLISH)

Prerequisites: Satisfactory completion of Year 10 Language and Literature

Level: Higher Level and Standard Level

Description: This is a pre-university course in literature. It provides opportunities for studying a range of themes and encourages independent thinking and learning.

Aims: The program aims to:
- Develop a personal and lasting appreciation of literature through literary study and criticism;
- Promote an international perspective through the study of literature from our own and different cultures;
- Introduce both classical and modern texts in various genres and styles;
- Create an awareness of language use and subtleties in both oral and written communication;
- Promote clarity and precision of argument in the student’s own presentations and essays.

Content:

<table>
<thead>
<tr>
<th>Component</th>
<th>Work Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Works in translation</td>
<td>Three works from other countries, read in translation</td>
</tr>
</tbody>
</table>
| Detailed Study (includes poetry, drama, novel, non-fiction prose) | HL – Three works  
SL – Two works |
| Literary genres | HL – Four Works  
SL – Three Works |
| Options | HL – Three Works  
SL – Three Works |

Higher Level and Standard Level differ in the number of texts, the depth and complexity of study and the duration of the final examinations.

Assessment:

<table>
<thead>
<tr>
<th>Component</th>
<th>Assessment</th>
</tr>
</thead>
</table>
| Works in translation | HL and SL – Written assignment of 1,200 – 1,500 words, with accompanying reflective statement.  
Externally Assessed 25% |
| Detailed Study (includes poetry, drama, novel, non-fiction prose) | HL - Individual oral commentary and discussion (20 minutes)  
SL – Individual Oral Commentary (10 minutes)  
Internally Assessed Moderated 15% |
| Literary Genres | HL – Exam  
2 x 2 hr papers  
SL – Exam  
2 x 1 ½ hr papers  
Externally Assessed 45% |
| Options | HL and SL: Individual Oral Presentation (10 – 15 minutes)  
Internally Assessed 15% |

LANGUAGE A: LITERATURE (SELF TAUGHT)

Level: Standard Level:

This course is for students who wish to study literature of their mother tongue language, other than English. Please consult with the IB coordinator if you wish to consider this course
Group 2

Language B – Language Acquisition

**LANGUAGE B ab initio – FRENCH**

**Prerequisites:** None
**Level:** Standard Level

**Description:** The course is designed to be followed over 2 years by students who have little or no previous experience of learning the target language. The main focus is the acquisition of language for everyday social interaction.

**Aims:** The Language B ab initio course aims to:
- Develop students’ intercultural understanding
- Enable the students to understand and use the language they have studied in a range of contexts and for a variety of purposes
- Enable students to use the language appropriately
- Encourage, through the study of texts and through social interaction, an awareness and appreciation of the different perspectives of people from other cultures
  - Develop students’ awareness of the role of language in relation to other areas of knowledge
- Provide the opportunity for enjoyment, creativity and intellectual stimulation through knowledge of a language
- Develop students’ awareness of the relationship between the languages and cultures with which they are familiar
- Provide students with a basis for further study, work and leisure through the use of an additional language
- Provide the opportunity for enjoyment, creativity and intellectual stimulation through knowledge of an additional language.

**Content:** Oral, written and comprehension activities based on 20 topics under the following themes:
- Individual and Society
- Leisure and Work
- Urban and Rural environment

**Assessment:**

<table>
<thead>
<tr>
<th>Type of assessment</th>
<th>Format of assessment</th>
<th>Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>External Assessment</strong></td>
<td></td>
<td><strong>75%</strong></td>
</tr>
<tr>
<td>Exam Paper 1 – 1.5 hours</td>
<td>Text handling</td>
<td>30%</td>
</tr>
<tr>
<td>Exam Paper 2 – 1 hour</td>
<td>Written production</td>
<td>25%</td>
</tr>
<tr>
<td>Written Assignment</td>
<td>Internally completed, externally assessed</td>
<td>20%</td>
</tr>
<tr>
<td><strong>Internal</strong></td>
<td></td>
<td><strong>25%</strong></td>
</tr>
<tr>
<td>Oral Component</td>
<td>One three-part oral to be internally assessed by the teacher and externally moderated by the IBO.</td>
<td>25%</td>
</tr>
</tbody>
</table>
**LANGUAGE B: GERMAN, INDONESIAN**

**Prerequisites:** Level 5 in Year 10

**Level:** Standard Level

**Description:** The course is designed for those who have 2 to 5 years’ experience of the target language, are not taught other subjects in the target language and are taught outside a country where the language is spoken.

**Aims:** The Language B course aims to:
- Enable the students to understand and use the language they have studied in a range of contexts and for a variety of purposes
- Enable students to use the language appropriately
- Encourage, through the study of texts and through social interaction, an awareness and appreciation of the different perspectives of people from other cultures
- Develop students’ awareness of the role of language in relation to other areas of knowledge
- Provide the opportunity for enjoyment, creativity and intellectual stimulation through knowledge of a language
- Develop students’ awareness of the relationship between the languages and cultures with which they are familiar

**Content:**
**Listening:** A range of spoken texts will be used to develop listening skills and strategies
**Speaking:** A range of interactive situations to develop the use of the spoken language for a variety of communicative purposes
**Reading:** strategies for reading a variety of authentic texts for different communicative purposes
**Writing:** production of a variety of texts for different communicative purposes

**Assessment:**

<table>
<thead>
<tr>
<th>Type of assessment</th>
<th>Format of assessment</th>
<th>Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>External Assessment</strong></td>
<td></td>
<td><strong>70%</strong></td>
</tr>
<tr>
<td>Exam Paper 1</td>
<td>Text handling Reading Written response</td>
<td>25%</td>
</tr>
<tr>
<td>Exam Paper 2</td>
<td>Written production</td>
<td>25%</td>
</tr>
<tr>
<td>Written Assignment</td>
<td>Receptive and written productive skills Internally completed, externally assessed</td>
<td>20%</td>
</tr>
<tr>
<td><strong>Internal</strong></td>
<td></td>
<td><strong>30%</strong></td>
</tr>
<tr>
<td>Oral Component</td>
<td>Two orals to be internally assessed by the teacher and externally moderated by the IBO. Individual Oral 20% Interactive oral activity 10%</td>
<td>30%</td>
</tr>
</tbody>
</table>

**LANGUAGE B: ENGLISH**

**Level:** Higher Level

This course is for students whose first language is not English. Please consult with the IB coordinator if you wish to consider this course.
Group 3
Individual and Societies

HISTORY

**Prerequisites:** None

**Level:** Higher Level and Standard Level

**Description:** History is one of the Group 3 subjects relating to Individuals and Societies. History is offered at both Standard Level and Higher Level. The two levels are taught together, as much of the content is the same.

**Aims:** To promote the acquisition, understanding and communication of historical knowledge of different cultures and to develop an appreciation of history as a discipline and of people living in a variety of places at different times.

**Content:** At **Standard** and **Higher Level**, two topics are studied:
- Prescribed Subject 3: The move to global war
- World History Topic 15: The Cold War: Superpower tensions and rivalries

Each student will be required to submit an historical investigation based on student interest.

At the **Higher Level only**, the course is the same as for Standard Level with the addition a regional study of aspects of the history of Europe and the Middle East, covering the 20th century. Three topics are studied:
- Topic 12: Imperial Russia: revolution and the Soviet Union (1855 – 1924)
- Topic 14: Europe in the interwar years (1918 – 1939)

**Assessment:**

<table>
<thead>
<tr>
<th>Type of assessment</th>
<th>Format of assessment</th>
<th>Weighting</th>
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<tbody>
<tr>
<td><strong>Standard Level Assessment</strong></td>
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<tr>
<td>Exam Paper 1 – 1 hour</td>
<td>Externally marked examination assessing the prescribed subject (source analysis).</td>
<td>30%</td>
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<tr>
<td>Exam Paper 2 – 1.5 hours</td>
<td>Externally marked examination assessing two major topics (2 essays)</td>
<td>45%</td>
</tr>
<tr>
<td>The Historical Investigation</td>
<td>This is marked internally and externally moderated</td>
<td>25%</td>
</tr>
<tr>
<td><strong>Higher Level Assessment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exam Paper 1 – 1 hour</td>
<td>Externally marked examination assessing the prescribed subject (source analysis).</td>
<td>20%</td>
</tr>
<tr>
<td>Exam Paper 2 – 1.5 hours</td>
<td>Externally marked examination assessing two major topics (2 essays)</td>
<td>25%</td>
</tr>
<tr>
<td>Exam Paper 3 – 2.5 hours</td>
<td>Externally marked examination assessing the Regional Study (3 essays)</td>
<td>35%</td>
</tr>
<tr>
<td>The Historical Investigation</td>
<td>This is marked internally and externally moderated</td>
<td>20%</td>
</tr>
</tbody>
</table>
PSYCHOLOGY

**Prerequisites**: None

**Level**: Higher Level and Standard Level

**Description**: The course focuses on the systematic study of behaviour and mental processes

**Aims**: Psychology is the systematic study of behaviour and mental processes, and the factors which influence them. It has its roots in both the natural and social sciences, which leads to a variety of research designs being described and analysed. IB Psychology studies the interaction between the biological, cognitive and sociocultural influences on human behaviour, while reflecting on research methodology and ethical considerations.

**Content**

Core Topics
- Each core topic has a HL component to be addressed in addition to the material covered by SL students
- Biological approaches to understanding behaviour
- Cognitive approaches to understanding behaviour
- Sociocultural approaches to understanding behaviour

Approaches to research (HL only)
- Quantitative research
- Qualitative research

Option topics
HL students will complete 2 option topics, SL students will complete 1 option topic
Option topics include: (selection is based on teacher discretion)
- Abnormal psychology
- Psychology of human relationships
- Developmental psychology
- Health psychology

**Assessment:**

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<tr>
<th>Type of assessment</th>
<th>Weighting</th>
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<tbody>
<tr>
<td>Internal Assessment - Higher Level</td>
<td>20%</td>
</tr>
<tr>
<td>Internal Assessment - Standard Level</td>
<td>25%</td>
</tr>
<tr>
<td>External Examination - Higher Level Assessment</td>
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<tr>
<td>Exam Paper 1 – 2 hours</td>
<td>35%</td>
</tr>
<tr>
<td>Exam Paper 2 – 2 hours</td>
<td>25%</td>
</tr>
<tr>
<td>Exam Paper 3 – 1 hour</td>
<td>20%</td>
</tr>
<tr>
<td>External Examination - Standard Level Assessment</td>
<td></td>
</tr>
<tr>
<td>Exam Paper 1 – 2 hours</td>
<td>50%</td>
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<tr>
<td>Exam Paper 2 – 2 hours</td>
<td>25%</td>
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ECONOMICS

Prerequisites: None
Level: Standard Level or Higher Level
Description: 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 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.

Content:
Section 1: Microeconomics
Section 2: Macroeconomics
Section 3: International Economics
Section 4: Development Economics

Students undertaking Economics at HL will be required to complete additional course content within each of sections.

Assessment:

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<tr>
<th>Type of assessment</th>
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<tbody>
<tr>
<td>External Exam</td>
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<tr>
<td>Paper 1 – 1.5 hours</td>
<td>Extended Response on Sections 1 and 2</td>
<td>80%</td>
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<tr>
<td>Paper 2 – 1.5 hours</td>
<td>Data Response on Sections 3 and 4</td>
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<tr>
<td>Paper 3 (HL only) - 1 hour</td>
<td>Short answer on all syllabus content</td>
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<tr>
<td>Internal</td>
<td></td>
<td></td>
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<tr>
<td>Portfolio</td>
<td>Three commentaries based on different sections of the syllabus and on published extracts from the news media</td>
<td>20%</td>
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</table>
Group 4
Experimental Sciences

BIOLOGY

Assumed Knowledge: Successful completion of Year 10 Science

Level: Standard Level or Higher Level

Description: Biology is one of the Group 4 subjects relating to Experimental Sciences. The two levels are taught together as much as possible as much of the content is the same.

Aims: To provide students with a rigorous pre-university course of study in Biology that develops intercultural understanding, open-mindedness, and the attitudes necessary for them to respect and evaluate a range of points of view.

Content: The SL course contains 110 hours of theory and 40 hours of practical work. The HL course contains 180 hours of theory and 60 hours of practical work.

Core for both SL and HL (95 hours)

- Cell biology
- Molecular biology
- Genetics
- Ecology
- Evolution and biodiversity
- Human physiology

Additional Higher Level (60 hours)
(more detailed coverage)

- Nucleic acids
- Metabolism, cell respiration and photosynthesis
- Plant biology
- Genetics and evolution
- Animal physiology

Option topic – 1 only (15 hours SL / 25 hours HL)

- Biotechnology and bioinformatics
- Neurobiology and behaviour
- Ecology and conservation
- Human physiology

Assessment:

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<tr>
<th>Type of assessment</th>
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<th>Weighting</th>
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<tbody>
<tr>
<td><strong>External Exam - Standard Level</strong></td>
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<td>80%</td>
</tr>
<tr>
<td>Paper 1 – 45 minutes</td>
<td>30 multiple choice questions on the core</td>
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<tr>
<td>Paper 2 – 1.25 hours</td>
<td>Short-answer and extended-response questions on the core</td>
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<tr>
<td>Paper 3 - 1 hour</td>
<td>Questions on the core and option material. <strong>Section A:</strong> one data-based question and several short-answer questions on experimental work. <strong>Section B:</strong> short-answer and extended-response questions from one option.</td>
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</tr>
<tr>
<td><strong>External Exam - Higher Level</strong></td>
<td></td>
<td>80%</td>
</tr>
<tr>
<td>Paper 1 – 1 hour</td>
<td>40 multiple choice questions (15 common to SL plus additional questions on the core and the AHL material).</td>
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<tr>
<td>Paper 2 – 2.25 hours</td>
<td>Short-answer and extended-response questions on the core and the AHL</td>
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</tr>
<tr>
<td>Paper 3 – 1.25 hours</td>
<td>Questions on the core, AHL and option material. <strong>Section A:</strong> one data-based question and several short-answer questions on experimental work. <strong>Section B:</strong> short-answer and extended-response questions from one option.</td>
<td></td>
</tr>
<tr>
<td><strong>Internal</strong></td>
<td>An individual investigation</td>
<td>20%</td>
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</table>
CHEMISTRY

Prerequisites: Completion of Year 10 Science (Chemistry topics) (Grade 5 or better).
Level: Standard Level or Higher Level

Description: Chemistry is one of the Group 4 subjects relating to Experimental Sciences. The two levels are taught together as much as possible as much of the content is the same.

Aims: To provide students with a rigorous pre-university course of study in Chemistry that develops intercultural understanding, open-mindedness, and the attitudes necessary for them to respect and evaluate a range of points of view.

Content: The SL course contains 110 hours of theory and 40 hours of practical work. The HL course contains 180 hours of theory and 60 hours of practical work.

Core for both SL and HL
- Stoichiometric relationships
- Atomic structure
- Periodicity
- Chemical bonding and structure
- Energetics/thermochemistry
- Chemical Kinetics
- Equilibrium
- Acids and bases
- Redox processes
- Organic chemistry
- Measurement and data processing

Additional Higher Level
(more detailed coverage)
- Atomic structure
- The periodic table – the transition metals
- Chemical bonding and structures
- Energetics/thermochemistry
- Chemical Kinetics
- Equilibrium
- Acids and bases
- Redox processes
- Organic chemistry
- Measurement and analysis

SL/HL option topics (15/25 hours each)
One topic from the following:
- Human biochemistry
- Modern analytical chemistry
- Chemistry in industry and technology
- Medicines and drugs
- Environmental chemistry
- Food chemistry
<table>
<thead>
<tr>
<th>Type of assessment</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>External Exam Standard Level</strong></td>
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</tr>
<tr>
<td>Paper 1 – 45 minutes</td>
<td>30 multiple choice questions</td>
<td></td>
</tr>
<tr>
<td>Paper 2 – 1.25 hours</td>
<td>Short-answer and extended-response questions on the core</td>
<td></td>
</tr>
<tr>
<td>Paper 3 – 1 hour</td>
<td>Questions on the core and option material. Section A: one data-based question and several short-answer questions on experimental work. Section B: short-answer and extended-response questions from one option.</td>
<td>80%</td>
</tr>
<tr>
<td><strong>External Exam Higher Level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paper 1 – 1 hour</td>
<td>40 multiple choice questions (15 common to SL plus additional questions on the core and the AHL material).</td>
<td>80%</td>
</tr>
<tr>
<td>Paper 2 – 2.25 hours</td>
<td>Short-answer and extended-response questions on the core and the AHL</td>
<td></td>
</tr>
<tr>
<td>Paper 3 – 1.25 hours</td>
<td>Questions on the core, AHL and option material. Section A: one data-based question and several short-answer questions on experimental work. Section B: short-answer and extended-response questions from one option.</td>
<td></td>
</tr>
<tr>
<td><strong>Internal</strong></td>
<td></td>
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</tr>
<tr>
<td>An internal assessment</td>
<td>A group 4 interdisciplinary project (10 hours) and an individual investigation</td>
<td>20%</td>
</tr>
</tbody>
</table>
PHYSICS

Prerequisites: Completion of Year 10 Science (Physics topics) and Mathematics (grade 5 or better)

Level: Standard Level or Higher Level

Description: Physics is one of the Group 4 subjects relating to Experimental Sciences. The two levels are taught together as much as possible as much of the content is the same.

Aims: To provide students with a rigorous pre-university course of study in Physics that develops intercultural understanding, open-mindedness, and the attitudes necessary for them to respect and evaluate a range of points of view.

Content: The SL course contains 110 hours of theory and 40 hours of practical work. The HL course contains 180 hours of theory and 60 hours of practical work.

Core
- Measurements and uncertainties
- Mechanics
- Thermal Physics
- Waves
- Electricity and magnetism
- Circular motion and gravitation
- Atomic, nuclear and particle physics
- Energy production

Additional Higher Level
- Wave phenomena
- Fields
- Electromagnetic induction
- Quantum and nuclear physics

Option to be select from:
- Relativity
- Engineering physics
- Imaging
- Astrophysics

Assessment:

<table>
<thead>
<tr>
<th>Type of assessment</th>
<th>Format of assessment</th>
<th>Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>External Exam Standard Level</strong></td>
<td></td>
<td>80%</td>
</tr>
<tr>
<td>Paper 1 – 45 minutes</td>
<td>30 multiple choice questions</td>
<td></td>
</tr>
<tr>
<td>Paper 2 – 1.25 hours</td>
<td>Short-answer and extended-response questions on the core</td>
<td></td>
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</tbody>
</table>
| Paper 3 - 1 hour | Questions on the core and option material.  
**Section A:** one data-based question and several short-answer questions on experimental work.  
**Section B:** short-answer and extended-response questions from one option. | |
| **External Exam Higher Level** | | 80% |
| Paper 1 – 1 hour | 40 multiple choice questions (15 common to SL plus additional questions on the core and the AHL material). | |
| Paper 2 – 2.25 hours | Short-answer and extended-response questions on the core and the AHL | |
| Paper 3 – 1.25 hours | Questions on the core, AHL and option material.  
**Section A:** one data-based question and several short-answer questions on experimental work.  
**Section B:** short-answer and extended-response questions from one option. | |
| **Internal** | | 20% |
| An internal assessment | A group 4 interdisciplinary project (10 hours) and an individual investigation | |
MATHEMATICAL STUDIES

Prerequisites: Grade 5 in Year 10 Mathematical Studies and a Level 6 or better in Criterion A

Level: Standard Level

Description: This course provides for students whose interests do not lie in a field where mathematical skills and techniques are a prerequisite for future pathways.

Aims: This course is designed to enable students to develop logical, critical and creative thinking skills, to problem solve and to develop an understanding of the principles and nature of the subject.

Content: The course consists of the study of seven topics:
• Number and Algebra
• Descriptive Statistics
• Logic, Sets and Probability
• Statistical Applications
• Geometry and Trigonometry
• Mathematical Models
• Introduction to differential Calculus

Assessment:

<table>
<thead>
<tr>
<th>Type of assessment</th>
<th>Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>External Assessment</strong></td>
<td></td>
</tr>
<tr>
<td>Exam Paper 1 - 1.5 hours</td>
<td>40%</td>
</tr>
<tr>
<td>Exam Paper 2 - 1.5 hours</td>
<td>40%</td>
</tr>
<tr>
<td><strong>Internal Assessment</strong></td>
<td></td>
</tr>
<tr>
<td>Project</td>
<td>20%</td>
</tr>
</tbody>
</table>

Project
The project is an individual piece of work involving the collection of information or the generation of measurements, and the analysis and evaluation of the information or measurements.

General Information
Calculators – Each candidate is required to have access to a graphic display calculator for the duration of both examination papers and the course.
MATHEMATICS (Higher or Standard Level)

Prerequisites for Higher Level: Grade 6/7 in Year 10 Mathematical Studies (Extension) and a Level 7 or better in Criterion A

Prerequisites for Standard Level: Grade 6 in Year 10 Mathematical Studies and a Level 6 or better in Criterion A

Description: This is a demanding course which serves as a pre-requisite for students who wish 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.

Aims: The course aims to develop logical, critical and creative thinking in Mathematics and to further the understanding of students with a good background in Mathematics, who are competent in a range of analytical and technical skills;

Content:
Compulsory Core Topics
- Algebra
- Functions and Equations
- Circular Functions & Trigonometry
- Vectors
- Statistics & Probability
- Calculus

HL Option Topic, chosen from the following:
- Statistics and Probability
- Sets, Relations and Groups
- Calculus
- Discrete Mathematics

Assessment:

<table>
<thead>
<tr>
<th>Type of assessment</th>
<th>Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Higher Level Assessment</td>
<td></td>
</tr>
<tr>
<td>Exam Paper - 12 hours</td>
<td>30%</td>
</tr>
<tr>
<td>Exam Paper - 22 hours</td>
<td>30%</td>
</tr>
<tr>
<td>Exam Paper - 31 hours</td>
<td>20%</td>
</tr>
<tr>
<td><strong>Mathematical Exploration</strong></td>
<td>20%</td>
</tr>
<tr>
<td>Standard Level Assessment</td>
<td></td>
</tr>
<tr>
<td>Exam Paper – 11.5 hours</td>
<td>40%</td>
</tr>
</tbody>
</table>
Group 6
The Arts

FILM

Prerequisites: None

Level: Standard Level or Higher Level

Description: Students have the opportunity to learn in detail about one of the most influential forces in our modern society – film. They will learn about, and be coached in, a broad variety of film theory and production techniques and approaches.

Aims: The Film course aims to promote:

• an appreciation and understanding of film as a complex art form
• an ability to formulate stories and ideas in film terms
• the practical and technical skills of production
• critical evaluation of film productions by the student and by others
• a knowledge of film-making traditions in more than one country

Content:
Part 2: Film theory and history: The study of films and film-making traditions from more than one country.
Part 3: Creative process — techniques and organization of production: The development of creative, analytical and production skills within film-making.

Assessment:
External Assessment (50%)
Independent study (25%): Rationale, script and list of sources for a short documentary production on an aspect of film theory and/or film history, based on a study of a minimum of two films. The chosen films must originate from more than one country. (SL: 8-10 pages, HL: 12-15 pages)
Presentation (25%): An oral presentation of a detailed critical analysis of a continuous extract from a prescribed film. (SL: 10min, HL: 15 min)

Internal Assessment (50%)
One completed film project with accompanying written documentation. The film may be undertaken as a group project or individually. (SL: 4-5 min film plus 1200 word written commentary, HL: 6-7 min film plus 40-60sec trailer plus 1750 word written commentary)
MUSIC

Prerequisites: Completion of Year 10 Music (Level 5 or better) and proficiency as an instrumentalist or vocalist.

Level: Standard Level, Higher Level

Description: Students need to receive specialist instrumental tuition on an individual basis if they wish to do HL Music or SL Solo Performance. At Higher Level, specialist music students prepare for tertiary study at university.

Aims: The aims of all subjects in group 6 are to enable students to:
▪ Enjoy lifelong engagement with the arts
▪ Become informed, reflective and critical practitioners in the arts
▪ Understand the dynamic and changing nature of the arts
▪ Explore and value the diversity of the arts across time, place and vultures
▪ Express ideas with confidence and competence
▪ Develop perceptual and analytical skills.

The aim of the music course at Standard Level and Higher Level is to enable students to:
▪ Develop their knowledge and potential as musicians, both personally and collaboratively.

Content:

Higher Level
Three compulsory parts:
▪ Musical perception (Prescribed work, musical styles and genres and a Musical Investigation which is an independent major research project).
▪ Solo Performance: instrumental or vocal recitals
▪ Creating: three contrasting compositions or arrangements.

Standard Level
Students with a background in music study and proficiency on an instrument may choose one of the following options:
▪ Solo Performance which comprises Musical Perception and analysis and a Solo Performance (voice or instrument) or one or more recitals.
  or
▪ Creating which comprises Musical Perception and Analysis and the creation of two contrasting works.

Assessment:

<table>
<thead>
<tr>
<th>Type of assessment</th>
<th>Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>External Assessment – Higher Level</strong></td>
<td>50%</td>
</tr>
<tr>
<td>Listening Paper Examination</td>
<td>30%</td>
</tr>
<tr>
<td>A Musical Investigation (2000 words)</td>
<td>20%</td>
</tr>
<tr>
<td><strong>Internal Assessment</strong></td>
<td>50%</td>
</tr>
<tr>
<td>Solo Performance</td>
<td>25%</td>
</tr>
<tr>
<td>Creating</td>
<td>25%</td>
</tr>
<tr>
<td><strong>External Assessment – Standard Level</strong></td>
<td>50%</td>
</tr>
<tr>
<td>Listening Paper Examination</td>
<td>30%</td>
</tr>
<tr>
<td>A Musical Investigation (2000 words)</td>
<td>20%</td>
</tr>
<tr>
<td><strong>Internal Assessment</strong></td>
<td>50%</td>
</tr>
<tr>
<td>Solo Performance or Creating</td>
<td>50%</td>
</tr>
</tbody>
</table>
**VISUAL ARTS**

**Prerequisites:**
Yr10 Visual Art or Yr10 Art Design are an advantage.

**Level:** Standard Level and Higher Level

**Description:**
The course consists of three interrelated areas; communicating visual arts, visual arts in context and visual arts methods. Students are required to investigate these three areas through exploration of theoretical practice, art-making practice and curatorial practice. Art-making practice involves practical exploration and artistic production. Theoretical practice involves evaluating, responding and investigating the work of others and their own in both visual and written form. Curatorial practice involves students developing artistic judgement in presenting and selecting their own work.

**Aims:**
The aims of the visual arts course are to enable students to:
- Be informed and investigate the wider world of visual arts to understand and appreciate cultural context within which they produce their own work.
- Think critically and experiment with techniques.
- Explore and acquire skills, techniques and processes with a variety of media to develop concepts.
- Understand how a body of artwork can communicate meaning and purpose for different audiences.
- Investigate, understand and apply the processes of selecting work for exhibition and public display.
- Engage in making decisions about the selection of their own work.

**Content:** This course is designed to equip students with the skills and knowledge needed to explore their potential for personal expression and to be able to compare works from differing cultural contexts. During the first year of the Visual Arts course, students will be introduced to art concepts and techniques looking at a minimum of three art-making forms and participating in exhibition visits. The second year of the course is student-centred with the teacher facilitating the student’s work through independent investigation and the production of a body of work leading to the students final curating of their own exhibition.

**Assessment:**
- Comparative Study - 20%
- Process Portfolio - 40%
- Exhibition - 40%

**IB ONLINE COURSES**

In an ongoing effort to offer as wide as possible a range of IB courses available to our students, Concordia facilitates online courses delivered by Pamoja Education.

Concordia will be offering the following subjects online:
- Business and Management HL/SL
- Information and Technology in a Global Society HL/SL
- Philosophy SL only

Course descriptions are available from the IB Diploma coordinator.

**Profile for success:**
Students who participate in online IB Diploma courses must exhibit a high degree of personal responsibility, meeting assignment deadlines and contacting their online teacher when assistance is needed. They need to be self-disciplined and motivated to succeed in the course. They should have strong reading and writing skills, good problem solving ability, and at least basic computer ability. Organizational and time management skills are especially important for success online, and students need to allocate appropriate time to complete course work; the school schedule will include modules designated for study in this course. Interacting with other members of the online course is an integral part of the experience, and students should be prepared to engage with their teacher and classmates on a timely and frequent basis.

- Participation in online courses will require teacher recommendation.
- The IB Coordinator will serve as liaison between the student, the Pamoja teacher and parents.