

THE RIVERINA ANGLICAN COLLEGE



SENIOR PATHWAYS HANDBOOK

International Baccalaureate
Diploma Programme
2022-2023



*The Riverina Anglican College is vibrant,
innovative and inclusive. It seeks to provide an excellent,
all-round education in a Christian environment.*



**THE RIVERINA
ANGLICAN COLLEGE**

MISSION

As a Christ centred school, The Riverina Anglican College transforms lives through exceptional education, empowering each candidate to act with wisdom, compassion, justice and resilience.

CORE VALUES

FAITH

We promote Christian values and community within the Anglican tradition.

LEARNING

We grow: intellectually, creatively, culturally, physically, socially and spiritually.

EXCELLENCE

We challenge each candidate to achieve their personal best.

INDIVIDUALITY

We celebrate the individual gifts of each candidate.

KINDNESS

We embody empathy, care and service.

INNOVATION

We think and create for tomorrow.

VISION

To be the school of choice in the Riverina.

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INTRODUCTION

The Senior Pathways Handbook: International Baccalaureate Diploma Programme (IBDP) has been prepared to acquaint students and parents with the courses and subjects available for study at the College, and to enable them to plan a program of study tailored to a student's particular needs.

The College prides itself on offering a wide range of subjects in both IBDP and HSC courses, and on its ability to cater for a varied cohort of students. The counselling process for each student moving to the next year level is designed to assist students in making appropriate choices for their study, and once students are in the course of their choice, the College's wellbeing program supports them in succeeding.

It must be noted that:

- Students may only select subjects from the course they choose to Study. IBDP subjects cannot be taken by HSC students and HSC students may not study IBDP subjects
- A subject may not run (at the discretion of the Principal) if there are insufficient students to make it viable
- Some subjects will be taught at the same time in the timetable and thus, in a very small number of cases, the choice of subjects may be restricted
- There is a course fee associated with the IBDP
- We make every effort to accommodate the subject choices of each student

All subject selections are completed through the subject selection process in Term 2. Students choosing subjects will have the opportunity to receive assistance in Homeroom, and may also schedule a meeting with Mr Anthony Heffer (Deputy Principal – Teaching, Learning and Innovation), Mrs Patricia Humble (Head of IBDP) or their Heads of House for specific advice. Parents who wish to be involved in this process are most welcome.

Career information is available to all students by contacting the Careers Advisor, Mrs Marie Knight, directly at the College at careers@trac.nsw.edu.au

Students choosing subjects for Year 11 and 12 may also change their preferences later in the year (dates are communicated via the College Newsletter and Website) provided pre-requisite requirements have been met and spaces are available in the class.

SENIOR WELLBEING

At The Riverina Anglican College, a strong understanding of student wellbeing underpins improved student academic performance. Therefore, the College approaches wellbeing and academic performance from a holistic perspective. Each aspect of a student's academic, spiritual, physical, emotional and social development is valued and nurtured through the College wellbeing framework.

The senior years of high school represent some of the most intense and trying times for students. As such, the College has a number of staff available to support our students. These roles include:

- **Head of Year:** supports general year wellbeing and specific student wellbeing
- **House Mentors:** support and interact with their students daily
- **Heads of House:** support student wellbeing across subjects
- **SWANS:** supports and advises staff in relating to differentiation and adjustments
- **Careers Advisor:** supports student choice for post school pathways
- **Guidance Counsellor:** supports study skill development of students
- **School Counsellor:** supports deeper wellbeing concerns
- **Director of College Wellbeing:** strategically supports wellbeing staff and individual students
- **Head of Secondary School:** strategically supports wellbeing and academic staff

Beyond these individual roles, the College House structure is designed to streamline communication between individual staff members. All staff at the College are responsible for supporting the wellbeing of students. However, teachers of senior subjects have an increased level of responsibility to challenge their students academically. The House structure is designed to ensure that these teachers can communicate effectively with mentors and Heads of House and/or Head of Year, escalating support in a timely fashion.

Looking after student wellbeing in senior years is vital to student success. Therefore, the College always seeks to work proactively and in partnership with parents. This requires strong and consistent communication between the College and parents to ensure that we have as much knowledge as possible to support our students. The College encourages parents to communicate regularly with the College. For subject specific issues the teacher is the first point of contact. If there are general concerns across subjects then the House Mentor, Head of Year or Head of House can be contacted.

CHOOSING A COURSE: IBDP, HSC, HSC (Non-ATAR) OR LIFE SKILLS

COURSE OPTIONS

The choice of courses and subjects for Years 11 and 12 may seem overwhelming for students and parents. While some senior students have goals they are already working towards many others do not.

To assist students and parents, the College seeks to disseminate information via a number of forums. These include the briefing of students during Careers lessons, focused discussions on course and subject selection, and information videos for parents and students. Students have been encouraged to talk to their teachers to gather additional information about subjects. Heads of Houses are available to discuss course and subject choices, as is Mrs Marie Knight in her capacity as Careers Adviser.

There are some important principles to observe when choosing a program of study for Years 11 and 12.

Decide on completing the IBDP, HSC, HSC (Non-ATAR) or a Life Skills course.

The first step to selecting senior subjects is deciding on which course of study the student wishes to complete. When deciding on a course, students and parents should consider the following:

- Is the student's post-school destination university, TAFE or the workforce?
- Does the student have vocational goals which do not require an ATAR?

NB. The IBDP only awards the diploma on satisfactory completion of the two-year programme. There is no early exit credential, such as the RoSA, for IBDP candidates.

SUBJECT SELECTION PROCESS

After having the various subjects available described, students will be contacted via their College email account with a link to the online course selection website where they will choose their course (IBDP or HSC). They will then choose their subjects for study in 2022. This will also require families printing out the selection sheet to be signed by the parents or caregiver to confirm they have been part of the decision making process.

Pre-requisites

Pre-requisites are subjects, recommended grades, or in some cases, an application process, which must be completed in order to pursue a particular subject in Year 11 and 12.

CAREER ADVICE

SEEKING CAREER ADVICE

Where university entry is being considered, knowledge of course requirements is important. Even if ideas about careers are unclear, students should know whether they have a scientific, artistic or technical interests. Students should ensure that subjects which underpin future studies are included. Clarification of pre-requisites for university courses can be checked in the [“University entry requirements 2023 for Year 10 students”](#). Other helpful information is also available on this site.

INTERNATIONAL BACCALAUREATE DIPLOMA

The International Baccalaureate Diploma Programme (IBDP) is a rigorous pre-university course of study designed for students in the 16 to 19 age range. It is a broad-based two-year course that aims to inspire students to be knowledgeable and inquiring, but also caring and compassionate. There is a strong emphasis on encouraging students to develop intercultural understanding, open-mindedness and the attitudes necessary for them to respect and evaluate a range of points of view.

International Baccalaureate mission statement

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

To this end the organisation works with schools, governments and international organisations to develop challenging programs of international education and rigorous assessment.

These programs encourage students across the world to become active, compassionate and lifelong learners who understand that other people, with their differences, can also be right (IBO, 2014a).

What are the components of the IB Diploma Programme?

The course is presented as six academic disciplines and the core elements (see page 12). It encourages the concurrent study of a broad range of academic areas.

The requirements of the IB Diploma Programme are:

- Study of six subjects covering the key academic areas of learning.
 - To allow for specialisation, three subjects (but not more than four) are chosen at Higher Level (HL). HL subjects are studied over 240 hours. HL subjects are extension subjects with greater breadth and depth. HL subjects should be selected based on a student's area of strength.
 - To ensure a broad education, three subjects are chosen at Standard Level (SL). SL subjects are studied over 150 hours.
- All Diploma Programme students participate in the three elements of the IB Diploma Programme core.
 - Theory of Knowledge (TOK) – encourages students to think about the nature of knowledge, to reflect on the process of learning in all their subjects, and to see and understand the connections between them. TOK is studied over 100 hours.
 - Extended Essay (EE) – a substantial piece of academic writing of up to 4000 words which enables students to investigate a topic of special interest that they have chosen themselves; this encourages the development of independent research skills expected at university.
 - Creativity, Activity, Service (CAS) – involves students in a range of enjoyable and significant experiences, as well as a CAS project.

How is the IBDP assessed?

Assessment is an integral aspect of teaching and learning. The guidelines of assessment in the Diploma Programme support curricular goals and encourage appropriate student learning. Both external and internal assessments are used in the Diploma Programme. IBDP examiners assess work produced for external assessment, while work produced for internal assessment is assessed by teachers and externally moderated by the IBO.

The approach to assessment used by the IBDP is criterion-based, not norm-referenced. This approach to assessment judges students' work by their performance in relation to identified levels of attainment, **and not in relation to the work of other students.**

Students are assessed for College Progress Grades throughout the IBDP based on the published grade descriptors for each subject. Final grades are determined by the IBO based on internal and external assessment. Grade descriptors consist of characteristics of performance at each grade. Grades are awarded from a range of one to seven.

The total IB Diploma Programme score is determined by combining the grade awarded for each subject (out of a possible 7) and the combined grade from the core elements (out of a possible 3). The total score (out of 45) is converted to an ATAR by the University Admissions Centre (UAC) for university admission processes.

Academic Integrity in the IBDP

Academic integrity is a principle informed by the attributes of the IBDP learner profile. In teaching, learning and assessment, academic integrity serves to promote personal integrity and engender respect for others and the integrity of their work. Upholding academic integrity also helps to ensure that all students have an equal opportunity to demonstrate the knowledge and skills they acquire during their studies.

In all their studies for the IBDP, students must demonstrate academic integrity and avoid any form of academic misconduct. The IBDP expects students to know what is and is not acceptable behaviour in the examination room, and expects students to know how to indicate and cite material originally developed by others. For these reasons, alleged breaches of academic integrity will be investigated by the IBDP.

Suitability for the IBDP

The IBDP is particularly suited to students with one or more of the following characteristics:

- An ability to cope with a university course when they leave school;
- Willingness to develop personal study habits, including self-discipline, self-motivation and time management;
- A capacity for thinking critically and creatively;
- Some fluency in a second language, or willingness to become fluent;
- An international outlook and a genuine concern for others.

The IBDP, while demanding, is open to the average and above-average student. It is a course of studies for a passionate and dedicated student who has a strong desire to learn.

IBDP SUBJECT SELECTIONS

Students are required to choose one subject from each of the following six groups:

Group 1 Language and Literature

A study of language and literature in a student's native language.

Subject offered: Language A:
Language and Literature
(English)

Group 2 Language Acquisition

A study of an additional language.

Subjects offered: French *ab initio*, French B and Spanish *ab initio*.

Group 3 Individuals and Societies

A study of the Humanities.

Subjects offered: Business Management, Geography, Global Politics, Environmental Systems and Societies, Psychology and History.

Group 4 Sciences

A study of the experimental sciences.

Subjects offered: Biology, Chemistry, Design Technology, Environmental Systems and Societies, Sports, Exercise and Health Science and Physics.

Group 5 Mathematics

A study of mathematics.

Subjects offered: Mathematics: Analysis and Approaches and Mathematics: Applications and Interpretations.

Group 6 The Arts

A study of the visual and performing arts.

Subjects offered: Music and Visual Arts

***Note:** Students may study a subject from Group 6 or a second subject from Groups 3 or 4.

In order to qualify for the full Diploma, students must study three of the six subjects at Higher Level (HL) and three at Standard Level (SL).



Figure 1. The Diploma Programme model (IBO, 2015a).

INTERNATIONAL BACCALAUREATE DIPLOMA PROGRAMME

SUBJECTS OFFERED 2022-2023

CORE SUBJECT: CREATIVITY, ACTIVITY, SERVICE (CAS)

COURSE DETAILS

- **Subject Group:** Core.
- **Level:** N/A.

This is a compulsory component of the IBDP Core.

COURSE DESCRIPTION

CAS is at the heart of the Diploma Programme. CAS is organised around the three strands of creativity, activity and service defined as follows.

- Creativity – exploring and extending ideas leading to an original or interpretive product or performance.
- Activity – physical exertion contributing to a healthy lifestyle.
- Service – collaborative and reciprocal engagement with the community in response to an authentic need.

CAS enables students to demonstrate attributes of the IBDP learner profile in real and practical ways, to grow as unique individuals and to recognise their role in relation to others. Students develop skills, attitudes and dispositions through a variety of individual and group experiences that provide students with opportunities to explore their interests and express their passions, personalities and perspectives. CAS complements a challenging academic program in a holistic way, providing opportunities for self-determination, collaboration, accomplishment and enjoyment.

CAS enables students to enhance their personal and interpersonal development. A meaningful CAS program is a journey of discovery of self and others. For many, CAS is profound and life-changing. Each individual student has a different starting point and different needs and goals. A CAS program is, therefore, individualized according to student interests, skills, values and background.

CAS Learning Outcomes

Student completion of CAS is based on the achievement of the seven CAS learning outcomes realised through the student's commitment to his or her CAS program over a period of 18 months.

In CAS, there are seven learning outcomes:

- Identify own strengths and develop areas for growth.
- Demonstrate that challenges have been undertaken, developing new skills in the process.
- Demonstrate how to initiate and plan a CAS experience.
- Show commitment to and perseverance in CAS experiences.
- Demonstrate the skills and recognise the benefits of working collaboratively.
- Demonstrate engagement with issues of global significance.
- Recognise and consider the ethics of choices and actions.

ASSESSMENT

Successful completion of CAS is a requirement for the award of the IB Diploma. While not formally assessed, students reflect on their CAS experiences and provide evidence in their CAS portfolios of achieving the seven learning outcomes.

Throughout the IBDP, students undertake a variety of CAS experiences, ideally on a weekly basis, for a minimum of 18 months. A CAS experience can be a single event or may be an extended series of events. They must also undertake at least one CAS project. A CAS project is a collaborative series of sequential CAS experiences lasting at least one month.

All CAS students are expected to maintain and complete a CAS portfolio as evidence of their engagement with CAS. The CAS portfolio is a collection of evidence that showcases CAS experiences and for student reflections; it is not formally assessed.

Completion of CAS is based on student achievement of the seven CAS learning outcomes. Through their CAS portfolio, students provide the school with evidence demonstrating achievement of each learning outcome.

Students will meet regularly with the CAS Coordinator to move through the five stages of CAS identified in the diagram below.

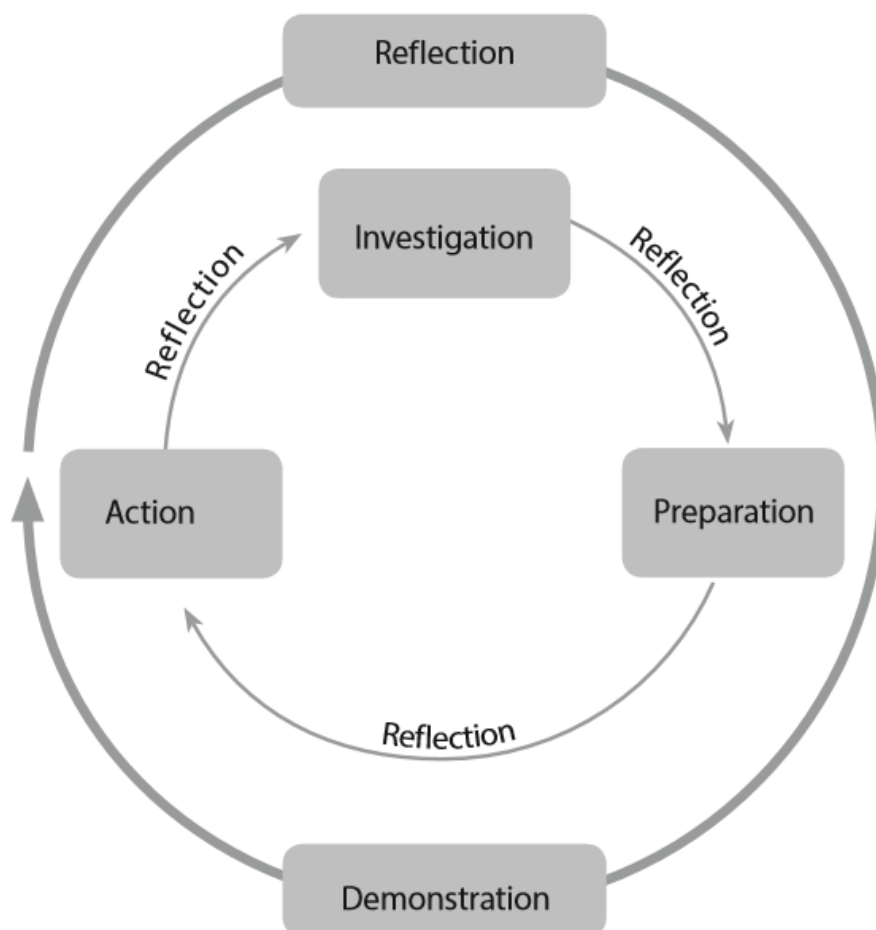


Figure 2. The five CAS Stages (IBO, 2015b)

CORE SUBJECT: EXTENDED ESSAY (EE)

COURSE DETAILS

- **Subject:** Core.
- **Level:** N/A.

This is a compulsory component of the IBDP Core.

COURSE DESCRIPTION

The Extended Essay (EE) offers the opportunity for students to investigate a topic of special interest, in the form of a 4000-word piece of independent research. Students select an area of research from Diploma Programme subjects and become acquainted with the independent research and writing skills expected at university. This leads to a major piece of formally presented, structured writing, in which ideas and findings are communicated in a reasoned and coherent manner, appropriate to the subject chosen. It is intended to promote high-level research and writing skills, intellectual discovery and creativity. As an authentic learning experience, the extended essay provides students with an opportunity to engage in personal research on a topic of choice, under the guidance of a supervisor.

In undertaking the EE, students model many of the elements of academic research by locating their topic within a broader disciplinary context, justifying the relevance of their research and critically evaluating the overall strength of the arguments made and sources used. Guided through this process by a supervisor, students are encouraged to reflect on insights gained, evaluate decisions, and respond to challenges encountered during the research.

CONTENT

The extended essay is a piece of independent research on a topic chosen by the student in consultation with an EE supervisor in the school. Students select an area of research from one of their six Diploma Programme subjects.

The structure of the essay is important. It helps students to organise the argument, making the best use of the evidence collected. There are six required elements of the final work to be submitted.

Six required elements of the extended essay are:

1. Title page
2. Contents page
3. Introduction
4. Body of the essay
5. Conclusion
6. References and bibliography

Students are supported by a supervision process recommended to be 3–5 hours, which includes three mandatory reflection sessions. Through the supervision and reflection process, as part of the learning process, students should be tracking their progress, monitoring specific issues and reflecting on their own learning and skills development.

ASSESSMENT

The extended essay is presented as a formal piece of sustained academic writing containing no more than 4000 words, accompanied by a reflection form of no more than 500 words. It is the result of approximately 40 hours of work by the student.

The extended essay is assessed using generic assessment criteria complemented by subject-specific interpretations of the criteria. Students will have access to this early on in the process so that they are clear about how their work will be assessed. They will also have access to exemplars of extended essays along with the accompanying examiner comments.

The extended essay is assessed using the following assessment criteria:

- Criterion A: Focus and method
- Criterion B: Knowledge and understanding
- Criterion C: Critical thinking
- Criterion D: Presentation
- Criterion E: Engagement

The extended essay is externally assessed by the IBO.

A student must achieve a D grade or higher to be awarded the Diploma.

The grade awarded for the extended essay in combination with the grade for theory of knowledge contributes up to three points to the total score for the IB Diploma, as outlined in the grade matrix below.

		Theory of knowledge					
		Grade A	Grade B	Grade C	Grade D	Grade E	No grade N
Extended essay	Grade A	3	3	2	2	Failing condition	Failing condition
	Grade B	3	2	2	1	Failing condition	Failing condition
	Grade C	2	2	1	0	Failing condition	Failing condition
	Grade D	2	1	0	0	Failing condition	Failing condition
	Grade E	Failing condition	Failing condition	Failing condition	Failing condition	Failing condition	Failing condition
	No grade N	Failing condition	Failing condition	Failing condition	Failing condition	Failing condition	Failing condition

Figure 3. The Diploma points matrix (IBO, 2014b)

CORE SUBJECT: THEORY OF KNOWLEDGE (TOK)

COURSE DETAILS

- **Subject:** Core.
- **Level:** N/A.

This is a compulsory component of the IBDP Core.

COURSE DESCRIPTION

The Theory of Knowledge (TOK) course plays a special role in the Diploma Programme by providing an opportunity for students to reflect on the nature, scope and limitations of knowledge and the process of knowing. In this way, the main focus of TOK is not on students acquiring new knowledge but on helping students to reflect on, and put into perspective, what they already know.

TOK underpins and helps to unite the subjects that students encounter in the rest of their DP studies. It engages students in explicit reflection on how knowledge is arrived at in different disciplines and areas of knowledge, on what these areas have in common and the differences between them. It is intended that through this holistic approach, discussions in one area will help to enrich and deepen discussions in other areas.

The course is an opportunity for teachers and students to engage in interesting conversations that cross the boundaries of individual disciplines and that help students to reflect on the knowledge they have acquired from both their academic studies and their lives outside the classroom. Students are encouraged to examine the evidence for claims and to consider, for example, how we distinguish fact from opinion, or how we evaluate the credibility of claims that we are exposed to in the media. They explore different methods and tools of inquiry and try to establish what it is about them that makes them effective, as well as considering their limitations.

CONTENT

The following 12 concepts have particular prominence within, and thread throughout, the TOK course: evidence, certainty, truth, interpretation, power, justification, explanation, objectivity, perspective, culture, values and responsibility. Exploration of the relationship between knowledge and these concepts can help students to deepen their understanding, as well as facilitating the transfer of their learning to new and different contexts.

The TOK course embraces the exploration of tensions, limitations and challenges relating to knowledge and knowing. However, it is also intended that TOK discussions will encourage students to appreciate and be inspired by the richness of human knowledge—and to consider the positive value of different kinds of knowledge.

The TOK syllabus is divided into three key elements:

Core theme: Knowledge and the knower

This theme provides an opportunity for students to reflect on themselves as knowers and thinkers, and on the different communities of knowers to which we belong.

Optional themes

Students are required to study two optional themes from the following five options:

- Knowledge and technology
- Knowledge and language
- Knowledge and politics
- Knowledge and religion
- Knowledge and indigenous societies

Areas of knowledge

Students are required to study the following five areas of knowledge:

- History
- The human sciences
- The natural sciences
- The arts
- Mathematics

ASSESSMENT

Students are assessed for College progress grades throughout the IBDP and then a final grade is derived from the following components.

Internal assessment accounts for 33% of the total assessment.

- **TOK exhibition.**

For this component, students are required to create an exhibition that explores how TOK manifests in the world around us.

This is internally assessed by the teacher and externally moderated by the IB at the end of the course.

External assessment accounts for 67% of the total assessment.

- **TOK Essay on a prescribe title.**

For this component, students are required to write an essay in response to one of the six prescribed titles that are issued by the IB for each examination session. As an external assessment component, it is marked by IB examiners.

A student must achieve a D grade or higher to be award the Diploma.

The grade awarded for the Extended Essay in combination with the grade for Theory of Knowledge contributes up to three points to the total score for the IB Diploma, as outlined in the grade matric found in the previous section (page 15).

GROUP 1: LANGUAGE AND LITERATURE (ENGLISH)

COURSE DETAILS

- **Subject:** Group 1, Language and Literature
- **Level:** Standard Level (SL) and Higher Level (HL) available.
- **Suggested Prior Achievement:** Grade A or B in Year 10 English for HL, Grade A – C in Year 10 English for SL.

COURSE DESCRIPTION

Language A: Language and Literature (English) involves the study of a wide range of literary and non-literary texts in a variety of media. By examining communicative acts across literary form and textual type alongside appropriate secondary readings, students will investigate the nature of language itself and the ways in which it shapes and is influenced by identity and culture. Approaches to study in the course are wide ranging and can include literary theory, sociolinguistics, media studies and critical discourse analysis among others. They will explore the crucial role language plays in communication, reflecting experience and shaping the world. Students will also learn about their own roles as producers of language and develop their productive skills.

CONTENT

The development of language skills and conceptual understandings of language in this course are presented through three areas of exploration. Across the three areas of exploration at least four works must be studied in the Standard Level course and at least six works must be studied in the Higher Level course. The works of study include works written in English and translated works selected from a prescribed list of authors.

The areas of exploration are:

- Readers, writers and texts
- Time and space
- Intertextuality – connecting texts

Students will use and develop linguistic skills throughout the course, including receptive skills, productive skills and interactive skills. Concepts help to organise and guide the study of texts across the three areas of exploration and facilitate the process of establishing connections between texts, making it easier for students to identify different ways in which the texts they study relate to one another. The concepts explored in this course include identity, culture, creativity, communication, perspective, transformation and representation.

ASSESSMENTS

Students are assessed for College progress grades throughout the IBDP and then a final grade is derived from the following components.

Internal assessment accounts for 30% in SL and 20% in HL of the total assessment.

- **Individual oral.**

This component consists of an individual oral which is internally assessed by the teacher and externally moderated by the IBO at the end of the course.

The Individual Oral must be supported by an extract from one non-literary text and one from a literary work. Students will offer a prepared response of 10 minutes, followed by 5 minutes of questions by the teacher.

External assessment accounts for 70% in SL and 80% in HL of the total assessment.

This is derived from two separate examination papers and, for HL students, the Higher Level Essay:

- **Paper 1: Guided textual analysis**

The paper consists of two non-literary passages, from two different text types, each accompanied by a question. Students choose one passage (SL) or two passages (HL) and write an analysis of the passage.

- **Paper 2: Comparative essay**

The paper consists of four general questions. In response to one question students write a comparative essay based on two works studied in the course.

- **Higher Level Essay (20% of final grade)**

Students submit an essay on one non-literary text or a collection of non-literary texts by one same author, or a literary text or work studied during the course. The essay requires students to construct a focused, analytical argument examining the work from a broad literary or linguistic perspective. It also requires them to adhere to the formal framework of an academic essay, using citations and references.

The essay must be 1200 – 1500 words in length.

A detailed breakdown of the external examination papers is outlined below.

Examination	Standard Level	Higher Level
Paper 1	Guided textual analysis Students analyse one passage	Guided textual analysis Students analyse two passages
	1 hour 15 minutes 35% of final grade	2 hours 15 minutes 35% of final grade
Paper 2	Comparative Essay Students respond to one question to compare two works studied	Comparative Essay Students respond to one question to compare two works studied
	1 hour 45 minutes 35% of final grade	1 hour 45 minutes 25% of final grade

The two papers are completed in November of the second year of the course and are marked by external examiners.

GROUP 2: LANGUAGE ACQUISITION—FRENCH AB INITIO

COURSE DETAILS

- **Subject:** Group 2, Language Acquisition
- **Level:** Standard Level (SL).
- **Suggested Prior Achievement:** Willingness to develop additional language skills.

COURSE DESCRIPTION

Language *ab initio* subjects are designed for students with little or no prior experience of the target language. The level of capacity for any student choosing a Language *ab initio* course should be at the beginners level where students are not able to understand or respond to spoken and written language on a range of common topics. All decisions on the appropriateness of the course for each student are made by the Diploma Coordinator in liaison with College Language Teachers. The most important consideration is that the course selected should be a challenging educational experience for the student.

This course aims to develop international-mindedness through the study of languages, cultures, and ideas and issues of global significance. Students develop the capacity to communicate in the language they have studied in a range of contexts and for a variety of purposes and provide students with a basis for further study, work and leisure through the use of an additional language.

CONTENT

Prescribed themes are common to the syllabuses of language acquisition subjects as they provide relevant contexts for study. Each theme has a list of topics that provide the students with opportunities to practise and explore the language as well as to develop intercultural understanding. Through the development of receptive, productive and interactive skills, students should be able to respond and interact appropriately in a defined range of everyday situations.

Language *ab initio* is organised into five themes, each including four topic areas for study:

Prescribed Themes	Prescribed Topics
Identities	<ul style="list-style-type: none">• Personal attributes• Personal relationships• Eating and drinking• Physical wellbeing
Experiences	<ul style="list-style-type: none">• Daily routine• Leisure• Holidays• Festivals and celebrations
Human Ingenuity	<ul style="list-style-type: none">• Transport• Entertainment• Media• Technology

Social Organisation	<ul style="list-style-type: none"> • Neighbourhood • Education • The workplace • Social issues
Sharing the Planet	<ul style="list-style-type: none"> • Climate • Physical geography • The environment • Global issues

ASSESSMENT

Students are assessed for College progress grades throughout the IBDP and then a final grade is derived from the following components.

Internal assessment accounts for 25% of the total assessment.

- **Individual oral.**

The individual oral assessment involves a conversation with the teacher, based on a visual stimulus and at least one additional course theme.

This component is internally assessed by the teacher and externally moderated by the IBO at the end of the course.

External assessment accounts for 75% of the total assessment.

This is derived from two separate examination papers.

- **Paper 1: Productive skills—Writing.**

Two written tasks of 70–150 words each from a choice of three tasks, based on different text types studied.

- **Paper 2: Receptive skills - Listening and Reading.**

Comprehension exercises drawn from the five themes studied.

Listening comprehension - Students respond to three audio passages and respond in the target language.

Reading comprehension - Students respond to three written texts and respond in the target language.

A detailed breakdown of the external examination papers is outlined below.

Examination	Standard Level
Paper 1	Productive skills - Writing Two written tasks based on different text types
	1 hour 25% of final grade
Paper 2	Receptive skills – Listening and Reading Listening comprehension (45 minutes) Reading comprehension (1 hour)
	1 hour 45 minutes 50% of final grade

The two papers are completed in November of the second year of the course and are marked by external examiners.

GROUP 2: LANGUAGE ACQUISITION—FRENCH B

COURSE DETAILS

- **Subject:** Group 2, Language Acquisition
- **Level:** Standard Level (SL).
- **Pre-requisites:** Stage 4 and 5 French or sufficient French language capacity.
- **Suggested Prior Achievement:** Grade A or B in Year 10 French.

COURSE DESCRIPTION

French B is a language acquisition course designed for students with some previous experience of the target language. In this course, students further develop their ability to communicate in the target language through the study of language, themes and texts. In doing so, they also develop conceptual understandings of how language works.

This course aims to develop international-mindedness through the study of languages, cultures, and ideas and issues of global significance. Students develop the capacity to communicate in the language they have studied in a range of contexts and for a variety of purposes and provide students with a basis for further study, work and leisure through the use of an additional language.

CONTENT

Prescribed themes are common to the syllabuses of language acquisition subjects as they provide relevant contexts for study. Each theme has a list of recommended topics that provide the students with opportunities to practise and explore the language as well as to develop intercultural understanding. Through the development of receptive, productive and interactive skills, students should be able to respond and interact appropriately in a defined range of everyday situations.

French is organised into five themes, each including recommended topic areas for study:

Prescribed Themes	Prescribed Topics
Identities	<ul style="list-style-type: none">• Lifestyles• Health and wellbeing• Beliefs and values• Subcultures• Language and identity
Experiences	<ul style="list-style-type: none">• Leisure activities• Holidays and travel• Life stories• Rites of passage• Customs and traditions• Migration

Human Ingenuity	<ul style="list-style-type: none"> • Entertainment • Artistic expressions • Communication and media • Technology • Scientific innovation
Social Organisation	<ul style="list-style-type: none"> • Social relationships • Community • Social engagement • Education • The working world • Law and order
Sharing the Planet	<ul style="list-style-type: none"> • The environment • Human rights • Peace and conflict • Equality • Globalization • Ethics • Urban and rural environment

ASSESSMENT

Students are assessed for College progress grades throughout the IBDP and then a final grade is derived from the following components.

Internal assessment accounts for 25% of the total assessment.

- **Individual oral.**

The individual oral assessment involves a conversation with the teacher, based on a visual stimulus followed by a discussion based on an additional course theme. This component is internally assessed by the teacher and externally moderated by the IBO at the end of the course.

External assessment accounts for 75% of the total assessment.

This is derived from two separate examination papers.

- **Paper 1: Productive skills—Writing**

One writing task of 250–400 words from a choice of three, each from a different theme, choosing a text type from among those listed in the examination instructions.

- **Paper 2: Receptive skills - Listening and Reading.**

Comprehension exercises drawn from the five themes studied.

Listening comprehension - Students respond to three audio passages and respond in the target language.

Reading comprehension - Students respond to three written texts and respond in the target language.

A detailed breakdown of the external examination papers is outlined below.

Examination	Standard Level
Paper 1	Productive skills - Writing One writing task
	1 hour 15 minutes 25% of final grade
Paper 2	Receptive skills – Listening and Reading Listening comprehension (45 minutes) Reading comprehension (1 hour)
	1 hour 45 minutes 50% of final grade

The two papers are completed in November of the second year of the course and are marked by external examiners.

GROUP 2: LANGUAGE ACQUISITION—SPANISH AB INITIO

COURSE DETAILS

- **Subject:** Group 2, Language Acquisition
- **Level:** Standard Level (SL).
- **Suggested Prior Achievement:** Willingness to develop additional language skills.

COURSE DESCRIPTION

Language *ab initio* subjects are designed for students with little or no prior experience of the target language. The level of capacity for any student choosing a Language *ab initio* course should be at the beginners level where students are not able to understand or respond to spoken and written language on a range of common topics. All decisions on the appropriateness of the course for each student are made by the Diploma Coordinator in liaison with College Language Teachers. The most important consideration is that the course selected should be a challenging educational experience for the student.

This course aims to develop international-mindedness through the study of languages, cultures, and ideas and issues of global significance. Students develop the capacity to communicate in the language they have studied in a range of contexts and for a variety of purposes and provide students with a basis for further study, work and leisure through the use of an additional language.

CONTENT

Prescribed themes are common to the syllabuses of language acquisition subjects as they provide relevant contexts for study. Each theme has a list of topics that provide the students with opportunities to practise and explore the language as well as to develop intercultural understanding. Through the development of receptive, productive and interactive skills, students should be able to respond and interact appropriately in a defined range of everyday situations.

Language *ab initio* is organised into five themes, each including four topic areas for study:

Prescribed Themes	Prescribed Topics
Identities	<ul style="list-style-type: none">• Personal attributes• Personal relationships• Eating and drinking• Physical wellbeing
Experiences	<ul style="list-style-type: none">• Daily routine• Leisure• Holidays• Festivals and celebrations
Human Ingenuity	<ul style="list-style-type: none">• Transport• Entertainment• Media• Technology

Social Organisation	<ul style="list-style-type: none"> • Neighbourhood • Education • The workplace • Social issues
Sharing the Planet	<ul style="list-style-type: none"> • Climate • Physical geography • The environment • Global issues

ASSESSMENT

Students are assessed for College progress grades throughout the IBDP and then a final grade is derived from the following components.

Internal assessment accounts for 25% of the total assessment.

- **Individual oral.**

The individual oral assessment involves a conversation with the teacher, based on a visual stimulus and at least one additional course theme.

This component is internally assessed by the teacher and externally moderated by the IBO at the end of the course.

External assessment accounts for 75% of the total assessment.

This is derived from two separate examination papers.

- **Paper 1: Productive skills—Writing.**

Two written tasks of 70–150 words each from a choice of three tasks, based on different text types studied.

- **Paper 2: Receptive skills - Listening and Reading.**

Comprehension exercises drawn from the five themes studied.

Listening comprehension - Students respond to three audio passages and respond in the target language.

Reading comprehension - Students respond to three written texts and respond in the target language.

A detailed breakdown of the external examination papers is outlined below.

Examination	Standard Level
Paper 1	Productive skills - Writing Two written tasks based on different text types
	1 hour 25% of final grade
Paper 2	Receptive skills – Listening and Reading Listening comprehension (45 minutes) Reading comprehension (1 hour)
	1 hour 45 minutes 50% of final grade

The two papers are completed in November of the second year of the course and are marked by external examiners.

GROUP 3: BUSINESS MANAGEMENT

COURSE DETAILS

- **Subject: Group 3, Individuals and Societies**
- **Level:** Standard Level (SL) or Higher Level (HL) are available.
- **Suggested Prior Achievement:** Grade A or B in Year 10 Geography and/or Commerce.

COURSE DESCRIPTION

Business Management aims 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 analyse, discuss and evaluate business activities at local, national and international levels. The course covers a range of organisations from all sectors, as well as the sociocultural and economic contexts in which those organisations operate. The course incorporates the use of contemporary examples and case studies at a variety of levels, from local to global, as well as smaller-scale businesses to multinational ones.

The course covers the key characteristics of business organisation and environment, and the business functions of human resource management, finance and accounts, marketing and operations management. Links between the topics are central to the course. Through the exploration of six underpinning concepts (change, culture, ethics, globalisation, innovation and strategy), the course allows students to develop a holistic understanding of today's complex and dynamic business environment. The course encourages the appreciation of ethical concerns at both a local and global level.

CONTENT

Business Management Standard Level (SL) and Higher Level (HL) students study a common core syllabus as identified by the core units listed. HL students study further sections in each unit in more detail, as identified below.

Unit 1: Business organisation and environment

- 1.1 Introduction to business management
- 1.2 Types of organisations
- 1.3 Organisational objectives
- 1.4 Stakeholders
- 1.5 External environment
- 1.6 Growth and evolution
- 1.7 Organisational planning tools (HL only)

Unit 2: Human resource management

- 2.1 Functions and evolution of human resource management
- 2.2 Organisational structure
- 2.3 Leadership and management
- 2.4 Motivation
- 2.5 Organisational (corporate) culture (HL only)
- 2.6 Industrial/employee relations (HL only)

Unit 3: Finance and accounts

- 3.1 Sources of finance
- 3.2 Costs and revenues
- 3.3 Break-even analysis
- 3.4 Final accounts (some HL only)
- 3.5 Profitability and liquidity ratio analysis
- 3.6 Efficiency ratio analysis (HL only)
- 3.7 Cash flow
- 3.8 Investment appraisal (some HL only)
- 3.9 Budgets (HL only)

Unit 4: Marketing

- 4.1 The role of marketing
- 4.2 Marketing planning (including introduction to the four Ps)
- 4.3 Sales forecasting (HL only)
- 4.4 Market research
- 4.5 The four Ps (product, price, promotion, place)
- 4.6 The extended marketing mix of seven Ps (HL only)
- 4.7 International marketing (HL only)
- 4.8 E-commerce

Unit 5: Operations management

- 5.1 The role of operations management
- 5.2 Production methods
- 5.3 Lean production and quality management (HL only)
- 5.4 Location
- 5.5 Production planning (HL only)
- 5.6 Research and development (HL only)
- 5.7 Crisis management and contingency planning (HL only)

ASSESSMENT

Students are assessed for College progress grades throughout the IBDP and then a final grade is derived from the following components.

Internal assessment accounts for 25% in SL and HL of the total assessment.

- **Written Commentary (SL only)**

Students produce a written commentary based on three to five supporting documents about a real issue or problem facing a particular organisation. The written commentary allows students to demonstrate the application of business management tools, techniques and theories to a business issue or problem. This work is completed over 15 hours. Maximum 1500 words.

- **Research Project (HL only)**

Students research and report on an issue facing an organisation or a decision to be made by an organisation (or several organisations). The research project allows students to demonstrate the application of their skills and knowledge to business issues or decision-making. This work is completed over 30 hours. Maximum 2000 words.

This component is internally assessed by the teacher and externally moderated by the IBO at the end of the course for both SL and HL students.

External assessment accounts for 75% in SL and HL of the total assessment. This is derived from two separate examination papers.

- Paper 1:**
 Section A - Students answer two of three structured questions based on the pre-seen case study.
 Section B - Students answer one compulsory structured question primarily based on the additional stimulus material.
 Section C - Students answer one compulsory extended response question primarily based on the additional stimulus material. (HL only)
- Paper 2:**
 Section A - Students answer one of two structured questions based on stimulus material with a quantitative focus.
 Section B - Students answer one of three structured questions based on stimulus material.
 Section C - Students answer one of three extended response questions primarily based on two concepts that underpin the course.

A detailed breakdown of the external examination papers is outlined over the page.

Examination	Standard Level	Higher Level
Paper 1	Section A: Two structured questions based on the pre-seen case study Section B: One compulsory structured question primarily based on the additional stimulus material (Units 1 - 5)	Section A: Two structured questions based on the pre-seen case study Section B: One compulsory structured question primarily based on the additional stimulus material Section C: One compulsory extended response question primarily based on the additional stimulus material (Units 1 – 5, including HL material)
	1 hour 15 minutes 30% of final grade	2 hours 15 minutes 35% of final grade
Paper 2	Section A: One structured question based on stimulus material with a quantitative focus Section B: One structured questions based on stimulus material Section C: One extended response question primarily based on two concepts that underpin the course (Units 1 – 5)	Section A: One structured question based on stimulus material with a quantitative focus Section B: Two structured questions based on stimulus material Section C: One extended response question primarily based on two concepts that underpin the course (Units 1 – 5, including HL material)
	1 hour 45 minutes 45% of final grade	2 hours 15 minutes 40% of final grade

The two papers are completed in November of the second year of the course and are marked by external examiners.

GROUP 3: ENVIRONMENTAL SYSTEMS AND SOCIETIES

COURSE DETAILS

- **Subject:** Group 3, Individuals and Societies OR Group 4, Sciences
- **Level:** Standard Level (SL) or Higher Level (HL) are available.
- **Suggested Prior Achievement:** Grade A – C in Year 10 Science, Geography and/or Agriculture.

COURSE DESCRIPTION

Environmental Systems and Societies (ESS) is an interdisciplinary course offered only at Standard Level. This course can fulfil either the Group 3 Individuals and Societies or the Group 4 Sciences requirement. The interdisciplinary nature of this course requires a broad skill set from students, including the ability to perform research and practical investigations and participate in philosophical discussion and problem-solving incorporating holistic thinking about environmental issues.

Environmental Systems and Societies is firmly grounded in both a scientific exploration of environmental systems in their structure and function, and in the exploration of cultural, economic, ethical, political and social interactions of societies with the environment. As a result of studying this course, students will become equipped with the ability to recognise and evaluate the impact of our complex system of societies on the natural world.

CONTENT

Environmental Systems and Societies students study the Core topics listed below.

Students engage in a range of practical activities over 30 hours including practical investigations, simulations and field work. Students have the option to participate in the Group 4 Project, a collaborative activity where students from the different Group 4 subjects work together on a scientific or technological topic. It can be practically or theoretically based and emphasises interdisciplinary cooperation and scientific processes.

Core:

- Topic 1: Foundations of environmental systems and societies
- Topic 2: Ecosystems and ecology
- Topic 3: Biodiversity and conservation
- Topic 4: Water and aquatic food production systems and societies
- Topic 5: Soil systems and terrestrial food production systems and societies
- Topic 6: Atmospheric systems and societies
- Topic 7: Climate change and energy production
- Topic 8: Human systems and resource use

Practical Scheme of Work:

- Teacher directed practical activities
- Individual investigation report (10 hours - submitted for moderation)
- Group 4 project (10 hours) - optional

ASSESSMENT

Students are assessed for College progress grades throughout the IBDP and then a final grade is derived from the following components.

Internal assessment accounts for 25% of the total assessment.

- **Individual investigation report.**

The individual investigation report is based on experimental work completed over 10 hours. Maximum 1500 – 2250 words. This component is internally assessed by the teacher and externally moderated by the IBO at the end of the course.

External assessment accounts for 75% of the total assessment.

This is derived from two separate examination papers:

- **Paper 1: Case Study.**

Students will be provided with a range of data in a variety of forms relating to a specific, previously unseen case study. Questions will be based on the analysis and evaluation of the data in the case study.

- **Paper 2: Shorts answer and structured essay.**

Section A: Short answer and data-based questions.

Section B: Two structured essay questions from a choice of four.

A detailed breakdown of the external examination papers is outlined below.

Examination	Standard Level
Paper 1	Case study. Analysis and evaluation of the data in the case study provided (Core topics)
	1 hour 25% of final grade
Paper 2	Section A: Short answer and data-based questions Section B: Two structured essay questions (Core topics)
	2 hours 50% of final grade

The two papers are completed in November of the second year of the course and are marked by external examiners.

GROUP 3: GEOGRAPHY

COURSE DETAILS

- **Subject: Group 3, Individuals and Societies**
- **Level:** Standard Level (SL) or Higher Level (HL) are available.
- **Suggested Prior Achievement:** Grade A – B in Year 10 Geography.

COURSE DESCRIPTION

Geography focuses on the interactions between individuals, societies and physical processes. Through the study of Geography, students seek to understand the differences in patterns of human distribution, interrelationships between human society and the physical environment, people's use of the Earth in time and space and how these differences are related to people's cultures and economies. Geography occupies the middle ground between the natural sciences and social sciences. It integrates physical and human geography and employs scientific and socioeconomic methodologies. It examines concepts and ideas from a variety of disciplines and helps students to appreciate alternative approaches, viewpoints and ideas.

CONTENT

Geography Standard Level (SL) and Higher Level (HL) students study a common core and optional geographic themes. HL students also study the HL core extension. The course focuses on developing an understanding of geographical concepts and skills, utilising case studies to illustrate content and to contextualise these concepts.

Geographic Themes – seven options.

Two options are studied at SL, and three options at HL.

- Freshwater – drainage basins
- Oceans and coastal margins
- Extreme environments
- Geophysical hazards
- Leisure, tourism and sport
- Food and health
- Urban environments

Core:

Geographic Perspectives – Global Change (SL & HL):

- Population distribution – changing population
- Global climate – vulnerability and resilience
- Global resource – consumption and security

Geographic Perspectives – Global Interactions (HL):

- Power, places and networks
- Human development and diversity
- Global risks and resilience

ASSESSMENT

Students are assessed for College progress grades throughout the IBDP and then a final grade is derived from the following components.

Internal assessment accounts for 25% in SL and 20% in HL of the total assessment.

- **Geographic fieldwork report.**

Students are required to undertake fieldwork collecting primary information and produce one written report that is based on a fieldwork question. This work is completed over 20 hours. This component is internally assessed by the teacher and externally moderated by the IBO at the end of the course. The requirements for this component are the same for SL and HL students. Maximum 2500 words.

External assessment accounts for 75% in SL and 80% in HL of the total assessment. This is derived from two/three separate examination papers.

- **Paper 1: Geographic themes**

Two options for SL, and three options for HL.

Each option has a structured question and one extended answer question from a choice of two.

- **Paper 2: Geographic perspectives - Global change**

Three structured questions, based on each SL/HL core unit.

Infographic or visual stimulus, with structured questions. One extended answer question from a choice of two.

- **Paper 3: Geographic perspectives - Global interactions (HL only)**

Choice of three extended answer questions, with two parts, based on each HL core extension unit.

A detailed breakdown of the external examination papers is outlined below.

Examination	Standard Level	Higher Level
Paper 1	Geographic themes (Two options)	Geographic themes (Three options)
	1 hour 30 minutes 35% of final grade	2 hours 15 minutes 35% of final grade
Paper 2	Geographic perspectives - Global change	Geographic perspectives - Global change
	1 hour 15 minutes 40% of final grade	1 hour 15 minutes 25% of final grade
Paper 3		Geographic perspectives - Global interactions
		1 hour 20% of final grade

The two/three papers are completed in November of the second year of the course and are marked by external examiners.

GROUP 3: GLOBAL POLITICS

COURSE DETAILS

- **Subject: Group 3, Individuals and Societies**
- **Level:** Standard Level (SL) or Higher Level (HL) are available.
- **Suggested Prior Achievement:** Grade A or B in Year 10 History, Geography and/or Commerce.

COURSE DESCRIPTION

Global Politics is an exciting, dynamic subject that draws on a variety of disciplines in the social sciences and humanities, reflecting the complex nature of many contemporary political issues. The study of Global Politics enables students to critically engage with different and new perspectives and approaches to politics in order to comprehend the challenges of the changing world and become aware of their role in it as active global citizens. This course explores fundamental political concepts such as power, equality, sustainability and peace in a range of contexts. It allows students to develop an understanding of the local, national, international and global dimensions of political activity and processes, as well as to explore political issues affecting their own lives.

CONTENT

Global Politics Standard Level (SL) and Higher Level (HL) students study four compulsory core units. Students participate in an engagement activity on a political issue of personal interest, complemented with research. Through a case studies approach, HL students also examine and evaluate two global political challenges, which by their nature are complex, contestable and interlinked.

Core: People, power and politics (SL & HL):

Four compulsory units:

- Power, sovereignty and international relations
- Human rights
- Development
- Peace and conflict

Engagement activity (SL & HL):

An engagement on a political issue of personal interest, complemented with research.

HL Extension: Global political challenges (HL):

Political issues in two of the following six global political challenges researched and presented through a case-study approach:

- Environment
- Poverty
- Health
- Identity
- Borders
- Security

ASSESSMENT

Students are assessed for College progress grades throughout the IBDP and then a final grade is derived from the following components.

Internal assessment accounts for 25% in SL and 40% in HL of the total assessment.

- **Engagement activity (SL and HL)**
Students are required to write a report on a political issue explored through engagement and research. Maximum 2000 words.
- **HL extension: Global political challenges (HL only)**
Students present two video recorded oral presentations (10-minute maximum each) of two case studies chosen from two different HL extension topics.

Both components are internally assessed by the teacher and externally moderated by the IBO at the end of the course.

External assessment accounts for 75% in SL and 60% in HL of the total assessment. This is derived from three separate examination papers.

- **Paper 1:** Stimulus-based paper based on a topic from one of the four core units. Four compulsory short-answer/structured questions.
- **Paper 2:** Extended response paper based on the four core units. Students must write two essays in SL and three essays in HL from a choice of eight, each selected from a different core unit.

A detailed breakdown of the external examination papers is outlined below.

Examination	Standard Level	Higher Level
Paper 1	Stimulus-based paper Four compulsory short-answer/structured questions (Core units)	Stimulus-based paper Four compulsory short-answer/structured questions (Core units)
	1 hour 15 minutes 30% of final grade	1 hour 15 minutes 20% of final grade
Paper 2	Extended response paper Two essays from a choice of eight (Core units)	Extended response paper Three essays from a choice of eight (Core units)
	1 hour 45 minutes 45% of final grade	2 hours 45 minutes 40% of final grade

The two papers are completed in November of the second year of the course and are marked by external examiners.

GROUP 3: HISTORY

COURSE DETAILS

- **Subject: Group 3, Individuals and Societies**
- **Level:** Standard Level (SL) or Higher Level (HL) are available.
- **Suggested Prior Achievement:** Grade A or B in Year 10 History.

COURSE DESCRIPTION

History 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 emphasises 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.

CONTENT

The History course offers teachers a great deal of flexibility over the topics they select to teach, allowing teachers to adapt the course to best meet the particular needs and interests of their students.

Teachers select one Prescribed Subject (from a list of five). Each prescribed subject consists of two case studies, each taken from a different region of the world. Two World History Topics (from a list of twelve) are also selected, with topic examples studied from more than one region of the world. Standard Level (SL) and Higher Level (HL) students study common prescribed subject and world history topics and complete a historical investigation.

HL students study an additional HL regional option (from a list of four) which forms the basis of an in-depth study of three sections from the selected option.

The selected areas of focus for the History course are listed below.

Prescribed Subject (SL & HL):

- The move to global war

World History Topics (SL & HL):

- Authoritarian states (20th century)
- Causes and effects of 20th-century wars

HL Regional Option - Depth study (HL only):

- History of Europe

ASSESSMENT

Students are assessed for College progress grades throughout the IBDP and then a final grade is derived from the following components.

Internal assessment accounts for 25% in SL and 20% in HL of the total assessment.

- **Historical investigation**

Students are required to complete a historical investigation on any historical topic of their choice that has not taken place in the last 10 years. This work is completed over 20 hours. Maximum 2200 words. This component is internally assessed by the teacher and externally moderated by the IBO at the end of the course. The requirements for this component are the same for SL and HL students.

External assessment accounts for 75% in SL and 80% in HL of the total assessment. This is derived from two/three separate examination papers.

- **Paper 1:** A source-based paper set on the prescribed subject. Students answer four structure questions.
- **Paper 2:** An essay paper based on the world history topics. Students answer two essay questions on the two topics studied.
- **Paper 3 (HL only):** An essay paper on one of the four HL regional options. Students answer three essay questions.

A detailed breakdown of the external examination papers is outlined below.

Examination	Standard Level	Higher Level
Paper 1	Source-based paper set on the prescribed subject <ul style="list-style-type: none"> • The move to global war Four structured questions	Source-based paper set on the prescribed subject <ul style="list-style-type: none"> • The move to global war Four structured questions
	1 hour 30% of final grade	1 hour 20% of final grade
Paper 2	Essay paper based on the world history topics <ul style="list-style-type: none"> • Authoritarian states (20th century) • Causes and effects of 20th-century wars Two essay questions	Essay paper based on the world history topics <ul style="list-style-type: none"> • Authoritarian states (20th century) • Causes and effects of 20th-century wars Two essay questions
	1 hour 30 minutes 45% of final grade	1 hour 30 minutes 25% of final grade
Paper 3		Essay paper on the regional option <ul style="list-style-type: none"> • History of Europe Three essay questions
		2 hours 30 minutes 35% of final grade

The two/three papers are completed in November of the second year of the course and are marked by external examiners.

GROUP 3: PSYCHOLOGY

COURSE DETAILS

- **Subject: Group 3, Individuals and Societies**
- **Level:** Standard Level (SL) or Higher Level (HL) are available.
- **Suggested Prior Achievement:** Grade A – B in Year 10 History or Geography.

COURSE DESCRIPTION

At the core of the Psychology course is an introduction to three different approaches to understanding behaviour: the biological, cognitive and sociocultural approaches. Students study and critically evaluate the knowledge, concepts, theories and research that have developed the understanding in these fields.

The interaction of these approaches to studying psychology forms the basis of a holistic and integrated approach to understanding mental processes and behaviour as a complex, dynamic phenomenon, allowing students to appreciate the diversity as well as the commonality between their own behaviour and that of others. The contribution and the interaction of the three approaches is understood through the four options in the course, providing an opportunity to take what is learned from the study of the approaches to psychology and apply it to specific lines of inquiry.

Psychology promotes an understanding of the various approaches to research and how they are used to critically reflect on the evidence as well as assist in the design, implementation, analysis and evaluation of the students' own investigations. Surrounding the approaches and the options are the overarching themes of research and ethics. A consideration of both is paramount to the nature of the subject.

CONTENT

Psychology Standard Level (SL) and Higher Level (HL) students study a common core syllabus as identified by the core units listed. HL students study further sections in each unit in more detail, as identified below. The approaches to researching behaviour are applied to each core unit. The option topics allow students to study a specialised area of psychology to apply their learning.

Core:

- Biological approach to understanding behaviour
 - the relationship between the brain and behaviour (SL and HL)
 - hormones and pheromones and their effects on behaviour (SL and HL)
 - the relationship between genetics and behaviour (SL and HL)
 - the role of animal research in understanding human behaviour (HL only)
- Cognitive approach to understanding behaviour
 - cognitive processing (SL and HL)
 - reliability of cognitive processes (SL and HL)
 - emotion and cognition (SL and HL)
 - cognitive processing in a technological (digital/modern) world (HL only)

- Sociocultural approach to understanding behaviour
 - the individual and the group (SL and HL)
 - cultural origins of behaviour and cognition (SL and HL)
 - cultural influences on individual behaviour (SL and HL)
 - the influence of globalization on individual behaviour (HL only)
- Approaches to researching behaviour (applied to each topic SL and HL)
 - the contribution of research methods used in each approach to understanding human behaviour
 - ethical considerations in the investigation of each approach to understanding human behaviour
 - Only HL students will be directly assessed on their understanding of approaches to research in Paper 3

Options:

One option is studied at SL, and two options at HL.

- Abnormal psychology
 - factors influencing diagnosis
 - etiology of abnormal psychology
 - treatment of disorders
- Developmental psychology
 - influences on cognitive and social development
 - developing an identity
 - developing as a learner
- Health psychology
 - determinants of health
 - health problems
 - promoting health
- Psychology of human relationships
 - personal relationships
 - group dynamics
 - social responsibility

ASSESSMENT

Students are assessed for College progress grades throughout the IBDP and then a final grade is derived from the following components.

Internal assessment accounts for 25% in SL and 20% in HL of the total assessment.

- **Experimental study**
Students will investigate a published study, theory or model relevant to their learning in psychology by conducting an experimental investigation and reporting the findings. This work is completed over 20 hours. This component is internally assessed by the teacher and externally moderated by the IBDP at the end of the course. The requirements for this component are the same for SL and HL students. Maximum 2200 words.

External assessment accounts for 75% in SL and 80% in HL of the total assessment. This is derived from two/three separate examination papers.

- **Paper 1: Core**
Three short-answer questions on the core approaches to psychology.
One essay from a choice of three on the biological, cognitive and sociocultural approaches. HL only: essays will reference additional HL topic.
- **Paper 2: Option**
One question (SL) or two questions (HL) from a choice of three on the option topics.
- **Paper 3: Approaches to research (HL only)**
Three short-answer questions on approaches to research.

A detailed breakdown of the external examination papers is outlined below.

Examination	Standard Level	Higher Level
Paper 1	Section A: Three short-answer questions on the core approaches to psychology Section B: One essay from a choice of three on the biological, cognitive and sociocultural approaches to behaviour	Section A: Three short-answer questions on the core approaches to psychology Section B: One essay from a choice of three on the biological, cognitive and sociocultural approaches to behaviour. One, two or all of the essays will reference the additional HL topic
	2 hours 50% of final grade	2 hours 40% of final grade
Paper 2	One question from a choice of three on one option	Two questions; one from a choice of three on each of two options
	1 hour 25% of final grade	2 hours 20% of final grade
Paper 3		Three short-answer questions from a list of six static questions (published in the guide) on approaches to research
		1 hour 20% of final grade

The two/three papers are completed in November of the second year of the course and are marked by external examiners.

GROUP 4: BIOLOGY

COURSE DETAILS

- **Subject:** Group 4, Sciences
- **Level:** Standard Level (SL) or Higher Level (HL) are available.
- **Suggested Prior Achievement:** Grade A – C in Year 10 Science.

COURSE DESCRIPTION

Biology is the study of life. The diversity of living organisms makes the study of biology both fascinating and challenging. Biologists attempt to understand the living world at all levels. With the development of new technology, our understanding of living organisms is growing rapidly. The intent of this course is to develop a broad general understanding of the concepts of the subject which can then be applied to any given situation. A focus on developing practical approaches through experimental work provides opportunities for collaboration and allows students to design investigations, collect and analyse data and communicate their findings.

CONTENT

Biology Standard Level (SL) and Higher Level (HL) students study a common core syllabus as identified by the Core topics listed below. HL students study further topics in more detail and depth in the Additional Higher Level topics identified. One Option topic is also studied by both SL and HL students.

Students engage in a range of practical activities (40 hours for SL students and 60 hours for HL students) including prescribed and other practical investigations, simulations and field work. Students also participate in the Group 4 Project, a collaborative activity where students from the different Group 4 subjects work together on a scientific or technological topic. It can be practically or theoretically based and emphasises interdisciplinary cooperation and scientific processes.

Core (SL & HL):

- Topic 1: Cell biology
- Topic 2: Molecular biology
- Topic 3: Genetics
- Topic 4: Ecology
- Topic 5: Evolution and biodiversity
- Topic 6: Human physiology

Additional Higher Level:

- Topic 7: Nucleic acids
- Topic 8: Metabolism, cell respiration and photosynthesis
- Topic 9: Plant biology
- Topic 10: Genetics and evolution
- Topic 11: Animal physiology

Option (SL & HL) – Choice of one from:

- Option A: Neurobiology and behaviour
- Option B: Biotechnology
- Option C: Ecology and conservation
- Option D: Human physiology

Practical Scheme of Work:

Prescribed and other practical activities

Individual investigation report (10 hours - submitted for moderation)

Group 4 project (10 hours)

ASSESSMENT

Students are assessed for College progress grades throughout the IBDP and then a final grade is derived from the following components.

Internal assessment accounts for 20% of the total assessment.

- **Individual investigation report.**

The individual investigation report is based on experimental work completed over 10 hours. Maximum 6 – 12 pages. This component is internally assessed by the teacher and externally moderated by the IBO at the end of the course.

The requirements for this component are the same for SL and HL students.

External assessment accounts for 80% of the total assessment.

This is derived from three separate examination papers:

- **Paper 1:** Multiple choice on the core topics.
Calculators not permitted.
- **Paper 2:** Data-based questions and short answer and extended response questions on core material.
- **Paper 3:**
Section A - Data-based questions and several short answer questions on experimental work.
Section B - Short answer and extended response questions from one option.

A detailed breakdown of the external examination papers is outlined below.

Examination	Standard Level	Higher Level
Paper 1	30 multiple-choice questions (Core topics)	40 multiple-choice questions (Core and AHL topics)
	45 minutes 20% of final grade	1 hour 20% of final grade
Paper 2	Data-based, short answer and extended response questions (Core topics)	Data-based, short answer and extended response questions (Core and AHL topics)
	1 hour 15 minutes 40% of final grade	2 hours 15 minutes 36% of final grade
Paper 3	Section A: Data-based questions and several short answer questions (Experimental work) Section B: Short answer and extended response questions (Option topic)	Section A: Data-based questions and several short answer questions (Experimental work) Section B: Short answer and extended response questions (Option topic)
	1 hour 20% of final grade	1 hour 15 minutes 24% of final grade

The three papers are completed in November of the second year of the course and are marked by external examiners.

GROUP 4: CHEMISTRY

COURSE DETAILS

- **Subject:** Group 4, Sciences
- **Level:** Standard Level (SL) or Higher Level (HL) are available.
- **Suggested Prior Achievement:** Grade A or B in Year 10 Science.

COURSE DESCRIPTION

Chemistry is often called the 'central science'. It involves the chemical principles that underpin the physical environment in which we live as well as biological systems. Chemistry is a science concerned with the study of the materials of our environment, their properties, and the way in which they interact with each other. Chemistry is also a prerequisite for many subjects in higher education. A focus on developing practical approaches through experimental work provides opportunities for collaboration and allows students to design investigations, collect and analyse data and communicate their findings.

CONTENT

Chemistry Standard Level (SL) and Higher Level (HL) students study a common core syllabus as identified by the Core topics listed below. HL students study further topics in more detail and depth in the Additional Higher Level topics identified. One Option topic is also studied by both SL and HL students.

Students engage in a range of practical activities (40 hours for SL students and 60 hours for HL students) including prescribed and other practical investigations, simulations, models and field work. Students also participate in the Group 4 Project, a collaborative activity where students from the different Group 4 subjects work together on a scientific or technological topic. It can be practically or theoretically based and emphasises interdisciplinary cooperation and scientific processes.

Core (SL & HL):

- Topic 1: Stoichiometric relationships
- Topic 2: Atomic structure
- Topic 3: Periodicity
- Topic 4: Chemical bonding and structure
- Topic 5: Energetics/Thermochemistry
- Topic 6: Chemical kinetics
- Topic 7: Equilibrium
- Topic 8: Acids and bases
- Topic 9: Redox processes
- Topic 10: Organic chemistry
- Topic 11: Measurement and data processing

Additional Higher Level:

Topic 12:	Atomic structure
Topic 13:	The Periodic Table - The transition metals
Topic 14:	Chemical bonding and structure
Topic 15:	Energetics/Thermochemistry
Topic 16:	Chemical kinetics
Topic 17:	Equilibrium
Topic 18:	Acids and bases
Topic 19:	Redox processes
Topic 20:	Organic chemistry
Topic 21:	Measurement and analysis

Option (SL & HL) – Choice of one from:

Option A:	Materials
Option B:	Biochemistry
Option C:	Energy
Option D:	Medicinal chemistry

Practical Scheme of Work:

Prescribed and other practical activities

Individual investigation report (10 hours - submitted for moderation)

Group 4 project (10 hours)

ASSESSMENT

Students are assessed for College progress grades throughout the IBDP and then a final grade is derived from the following components.

Internal assessment accounts for 20% of the total assessment.

- **Individual investigation report.**

The individual investigation report is based on experimental work completed over 10 hours. Maximum 6 – 12 pages. This component is internally assessed by the teacher and externally moderated by the IBO at the end of the course.

The requirements for this component are the same for SL and HL students.

External assessment accounts for 80% of the total assessment.

This is derived from three separate examination papers:

- **Paper 1:** Multiple choice on the core topics.
Calculators not permitted.
- **Paper 2:** Data-based questions and short answer and extended response questions on core material.
- **Paper 3:**
Section A - Data-based questions and several short answer questions on experimental work.
Section B - Short answer and extended response questions from one option.

A detailed breakdown of the external examination papers is outlined below.

Examination	Standard Level	Higher Level
Paper 1	30 multiple-choice questions (Core topics)	40 multiple-choice questions (Core and AHL topics)
	45 minutes 20% of final grade	1 hour 20% of final grade
Paper 2	Data-based, short answer and extended response questions (Core topics)	Data-based, short answer and extended response questions (Core and AHL topics)
	1 hour 15 minutes 40% of final grade	2 hours 15 minutes 36% of final grade
Paper 3	Section A: Data-based questions and several short answer questions (Experimental work) Section B: Short answer and extended response questions (Option topic)	Section A: Data-based questions and several short answer questions (Experimental work) Section B: Short answer and extended response questions (Option topic)
	1 hour 20% of final grade	1 hour 15 minutes 24% of final grade

The three papers are completed in November of the second year of the course and are marked by external examiners.

GROUP 4: DESIGN TECHNOLOGY

COURSE DETAILS

- **Subject: Group 4, Sciences**
- **Level:** Standard Level (SL) or Higher Level (HL) are available.
- **Suggested Prior Achievement:** Grade A – C in Year 10 Science and/or a Grade A or B in an Industrial Technology or STEM course.

COURSE DESCRIPTION

Design Technology aims to develop internationally minded students whose deeper understanding of the design and technological world facilitates a shared and ethical guardianship of the planet. Inquiry and problem-solving are at the heart of this subject. The design cycle provides the process for students to inquiry into problems requiring a design solution and then develop, test and evaluate solutions generated. Solutions can be defined as a model, prototype, product or system that students have developed independently. Critical thinking and design skills are applied in a practical context in this course.

CONTENT

Design Technology Standard Level (SL) and Higher Level (HL) students study a common core syllabus as identified by the Core topics listed below. HL students study further topics in more detail and depth in the Additional Higher Level topics identified.

Students engage in a range of practical activities (60 hours for SL students and 96 hours for HL students) to develop manipulative skills and allow students to demonstrate the safe, competent and methodical use of a range of techniques and equipment, which can then be applied to a range of design contexts.

Students also participate in the Group 4 Project, a collaborative activity where students from the different Group 4 subjects work together on a scientific or technological topic. It can be practically or theoretically based and emphasises interdisciplinary cooperation and scientific processes.

Core (SL & HL):

- | | |
|----------|--|
| Topic 1: | Human factors and ergonomics |
| Topic 2: | Resource management and sustainable production |
| Topic 3: | Modelling |
| Topic 4: | Raw material to final product |
| Topic 5: | Innovation and design |
| Topic 6: | Classic design |

Additional Higher Level:

Topic 7:	User-centred design (UCD)
Topic 8:	Sustainability
Topic 9:	Innovation and markets
Topic 10:	Commercial production

Practical Scheme of Work:

Teacher directed practical activities

Design project (40 hours for SL or 60 hours for HL – submitted for moderation)

Group 4 project (10 hours)

ASSESSMENT

Students are assessed for College progress grades throughout the IBDP and then a final grade is derived from the following components.

Internal assessment accounts for 40% of the total assessment.

- **Individual design project.**

The individual design project is based on work completed over 40 hours for SL and 60 hours for HL. The design project is assessed on four common criteria with two additional criteria for HL projects. Maximum 38 pages SL and 50 pages HL.

- Criterion A: Analysis of a design opportunity
- Criterion B: Conceptual design
- Criterion C: Development of a detailed design
- Criterion D: Testing and evaluation
- Criterion E: Commercial production (HL only)
- Criterion F: Marketing strategies (HL only)

This component is internally assessed by the teacher and externally moderated by the IBO at the end of the course.

External assessment accounts for 60% of the total assessment.

This is derived from two/three separate examination papers:

- **Paper 1:** Multiple choice on the core topics.
Calculators not permitted.
- **Paper 2:**
Section A - Data-based questions and several short answer questions on core material.
Section B - One extended response question (from a choice of three) on core material.
- **Paper 3 (HL only):**
Section A: Two structured questions on the HL additional material, both compulsory.
Section B: One structured question on the HL material, based on a case study.

A detailed breakdown of the external examination papers is outlined below.

Examination	Standard Level	Higher Level
Paper 1	30 multiple-choice questions (Core topics)	40 multiple-choice questions (Core and AHL topics)
	45 minutes 30% of final grade	1 hour 20% of final grade
Paper 2	Section A: Data-based questions and several short answer questions Section B: One extended response question (Core topics)	Section A: Data-based questions and several short answer questions Section B: One extended response question (Core topics)
	1 hour 30 minutes 30% of final grade	1 hours 30 minutes 20% of final grade
Paper 3		Section A: Two compulsory structured questions Section B: One structured question based on a case study (AHL topics)
		1 hour 30 minutes 20% of final grade

The two/three papers are completed in November of the second year of the course and are marked by external examiners.

GROUP 4: ENVIRONMENTAL SYSTEMS AND SOCIETIES

COURSE DETAILS

- **Subject:** Group 4, Sciences OR Group 3, Individuals and Societies
- **Level:** Standard Level (SL) or Higher Level (HL) are available.
- **Suggested Prior Achievement:** Grade A – C in Year 10 Science, Geography and/or Agriculture.

COURSE DESCRIPTION

Environmental Systems and Societies (ESS) is an interdisciplinary course offered only at Standard Level. This course can fulfil either the Group 3 Individuals and Societies or the Group 4 Sciences requirement. The interdisciplinary nature of this course requires a broad skill set from students, including the ability to perform research and practical investigations and participate in philosophical discussion and problem-solving incorporating holistic thinking about environmental issues.

Environmental Systems and Societies is firmly grounded in both a scientific exploration of environmental systems in their structure and function, and in the exploration of cultural, economic, ethical, political and social interactions of societies with the environment. As a result of studying this course, students will become equipped with the ability to recognise and evaluate the impact of our complex system of societies on the natural world.

CONTENT

Environmental Systems and Societies students study the Core topics listed below.

Students engage in a range of practical activities over 30 hours including practical investigations, simulations and field work. Students have the option to participate in the Group 4 Project, a collaborative activity where students from the different Group 4 subjects work together on a scientific or technological topic. It can be practically or theoretically based and emphasises interdisciplinary cooperation and scientific processes.

Core:

- Topic 1: Foundations of environmental systems and societies
- Topic 2: Ecosystems and ecology
- Topic 3: Biodiversity and conservation
- Topic 4: Water and aquatic food production systems and societies
- Topic 5: Soil systems and terrestrial food production systems and societies
- Topic 6: Atmospheric systems and societies
- Topic 7: Climate change and energy production
- Topic 8: Human systems and resource use

Practical Scheme of Work:

- Teacher directed practical activities
- Individual investigation report (10 hours - submitted for moderation)
- Group 4 project (10 hours) - optional

ASSESSMENT

Students are assessed for College progress grades throughout the IBDP and then a final grade is derived from the following components.

Internal assessment accounts for 25% of the total assessment.

- **Individual investigation report.**

The individual investigation report is based on experimental work completed over 10 hours. Maximum 1500 – 2250 words. This component is internally assessed by the teacher and externally moderated by the IBO at the end of the course.

External assessment accounts for 75% of the total assessment.

This is derived from two separate examination papers:

- **Paper 1: Case Study.**

Students will be provided with a range of data in a variety of forms relating to a specific, previously unseen case study. Questions will be based on the analysis and evaluation of the data in the case study.

- **Paper 2: Shorts answer and structured essay.**

Section A: Short answer and data-based questions.

Section B: Two structured essay questions from a choice of four.

A detailed breakdown of the external examination papers is outlined below.

Examination	Standard Level
Paper 1	Case study. Analysis and evaluation of the data in the case study provided (Core topics)
	1 hour 25% of final grade
Paper 2	Section A: Short answer and data-based questions Section B: Two structured essay questions (Core topics)
	2 hours 50% of final grade

The two papers are completed in November of the second year of the course and are marked by external examiners.

GROUP 4: SPORTS, EXERCISE AND HEALTH SCIENCE (SEHS)

COURSE DETAILS

- **Subject: Group 4, Sciences**
- **Level:** Standard Level (SL) or Higher Level (HL) are available
- **Suggested Prior Achievement:** Grade A – C in Year 10 Science and/or PDHPE.

COURSE DESCRIPTION

Sports, Exercise and Health Science (SEHS) explores the science underpinning physical performance. The course incorporates the disciplines of anatomy and physiology, biomechanics, psychology and nutrition. Students carry out practical (experimental) investigations in both laboratory and field settings. SEHS offers a deeper understanding of the issues related to sports, exercise and health in the 21st century and addresses the international dimension and ethics related to both the individual and global context.

CONTENT

Sports, Exercise and Health Science Standard Level (SL) and Higher Level (HL) students study a common core syllabus as identified by the Core topics listed below. HL students study further topics in more detail and depth in the Additional Higher Level topics identified. Two Option topics are also studied by both SL and HL students.

Students engage in a range of practical activities (40 hours for SL students and 60 hours for HL students) including prescribed and other practical investigations, simulations and field work. Students also participate in the Group 4 Project, a collaborative activity where students from the different Group 4 subjects work together on a scientific or technological topic. It can be practically or theoretically based and emphasises interdisciplinary cooperation and scientific processes.

Core (SL & HL):

- Topic 1: Anatomy
- Topic 2: Exercise physiology
- Topic 3: Energy systems
- Topic 4: Movement analysis
- Topic 5: Skill in sports
- Topic 6: Measurement and evaluation of human performance

Additional Higher Level:

- Topic 7: Further anatomy
- Topic 8: The endocrine system
- Topic 9: Fatigue
- Topic 10: Friction and drag
- Topic 11: Skill acquisition and analysis
- Topic 12: Genetics and athletic performance
- Topic 13: Exercise and immunity

Option (SL & HL) – Choice of two from:

- Option A: Optimising physiological performance
- Option B: Psychology of sports
- Option C: Physical activity and health
- Option D: Nutrition for sports, exercise and health

Practical Scheme of Work:

Prescribed and other practical activities

Individual investigation report (10 hours - submitted for moderation)

Group 4 project (10 hours)

ASSESSMENT

Students are assessed for College progress grades throughout the IBDP and then a final grade is derived from the following components.

Internal assessment accounts for 20% of the total assessment.

- **Individual investigation report.**
 - The individual investigation report is based on experimental work completed over 10 hours. Maximum 6 – 12 pages. This component is internally assessed by the teacher and externally moderated by the IBO at the end of the course.
 - The requirements for this component are the same for SL and HL students.

External assessment accounts for 80% of the total assessment.

This is derived from three separate examination papers:

- **Paper 1:** Multiple choice on the core topics.
 - Calculators not permitted.
- **Paper 2:**
 - Section A - Data-based questions and short answer on core material.
 - Section B - Students answer two extended-response questions on the core and AHL (from a choice of four).
- **Paper 3: Option topics**
 - Several short answer and extended response questions (all compulsory) in each of the two options studied.

A detailed breakdown of the external examination papers is outlined below.

Examination	Standard Level	Higher Level
Paper 1	30 multiple-choice questions (Core topics)	40 multiple-choice questions (Core and AHL topics)
	45 minutes 20% of final grade	1 hour 20% of final grade
Paper 2	Section A: Data-based questions and short answer Section B: Two extended response questions (Core topics)	Section A: Data-based questions and short answer Section B: Two extended response questions (Core and AHL topics)
	1 hour 15 minutes 40% of final grade	2 hours 15 minutes 35% of final grade
Paper 3	Short answer and extended response questions in each of the two options studied. (Option topics)	Short answer and extended response questions in each of the two options studied. (Option topics)
	1 hour 20% of final grade	1 hour 15 minutes 25% of final grade

The three papers are completed in November of the second year of the course and are marked by external examiners.

GROUP 4: PHYSICS

COURSE DETAILS

- **Subject:** Group 4, Sciences
- **Level:** Standard Level (SL) or Higher Level (HL) are available.
- **Suggested Prior Achievement:** Grade A or B in Year 10 Science and/or Mathematics.

COURSE DESCRIPTION

Physics is the most fundamental of the experimental sciences in that it seeks to explain features of the natural world, primarily in terms of the interactions between matter and energy. Physics offers students a unique way of learning about these basic concepts. Students gain skills to enable them to link theories and practical investigations and apply them to daily life. A focus on developing practical approaches through experimental work provides opportunities for students to design investigations, collect and analyse data, collaborate and communicate their findings.

CONTENT

Physics Standard Level (SL) and Higher Level (HL) students study a common core syllabus as identified by the Core topics listed below. HL students study further topics in more detail and depth in the Additional Higher Level topics identified. One Option topic is also studied by both SL and HL students.

Students engage in a range of practical activities (40 hours for SL students and 60 hours for HL students) including prescribed and other practical investigations, simulations and field work. Students also participate in the Group 4 Project, a collaborative activity where students from the different Group 4 subjects work together on a scientific or technological topic. It can be practically or theoretically based and emphasises interdisciplinary cooperation and scientific processes.

Core Topics (SL & HL):

Topic 1:	Measurements and uncertainties
Topic 2:	Mechanics
Topic 3:	Thermal physics
Topic 4:	Waves
Topic 5:	Electricity and magnetism
Topic 6:	Circular motion and gravitation
Topic 7:	Atomic, nuclear and particle physics
Topic 8:	Energy production

Additional Higher Level Topics:

Topic 9:	Wave phenomena
Topic 10:	Fields
Topic 11:	Electromagnetic induction
Topic 12:	Quantum and nuclear physics

Option (SL & HL) – Choice of one from:

- Option A: Relativity
- Option B: Engineering physics
- Option C: Imaging
- Option D: Astrophysics

Practical Scheme of Work:

Prescribed and other practical activities
Individual investigation report (10 hours - submitted for moderation)
Group 4 project (10 hours)

ASSESSMENTS

Students are assessed for College progress grades throughout the IBO and then a final grade is derived from the following components.

Internal assessment accounts for 20% of the total assessment.

- **Individual investigation report.**
The individual investigation report is based on experimental work completed over 10 hours. Maximum 6 – 12 pages. This component is internally assessed by the teacher and externally moderated by the IBDP at the end of the course.
The requirements for this component are the same for SL and HL students.

External assessment accounts for 80% of the total assessment.

This is derived from three separate examination papers:

- **Paper 1:** Multiple choice on the core topics.
Calculators not permitted.
- **Paper 2:** Data-based questions and short answer and extended response questions on core material.
- **Paper 3:**
Section A - Data-based questions and several short answer questions on experimental work.
Section B - Short answer and extended response questions from one option.

A detailed breakdown of the external examination papers is outlined below.

Examination	Standard Level	Higher Level
Paper 1	30 multiple-choice questions (Core topics)	40 multiple-choice questions (Core and AHL topics)
	45 minutes 20% of final grade	1 hour 20% of final grade
Paper 2	Data-based, short answer and extended response questions (Core topics)	Data-based, short answer and extended response questions (Core and AHL topics)
	1 hour 15 minutes 40% of final grade	2 hours 15 minutes 36% of final grade
Paper 3	Section A: Data-based questions and several short answer questions (Experimental work) Section B: Short answer and extended response questions (Option topic)	Section A: Data-based questions and several short answer questions (Experimental work) Section B: Short answer and extended response questions (Option topic)
	1 hour 20% of final grade	1 hour 15 minutes 24% of final grade

The three papers are completed in November of the second year of the course and are marked by external examiners.

GROUP 5: MATHEMATICS—ANALYSIS AND APPROACHES

COURSE DETAILS

- **Subject: Group 5, Mathematics**
- **Level:** Standard Level (SL) or Higher Level (HL) are available.
- **Suggested Prior Achievement:** Grade A or B in Stage 5.3 Advanced Mathematics.

COURSE DESCRIPTION

Mathematics has been described as the study of structure, order and relation that has evolved from the practices of counting, measuring and describing objects. Mathematics provides a unique language to describe, explore and communicate the nature of the world we live in as well as being a constantly building body of knowledge and truth in itself that is distinctive in its certainty.

Mathematics: Analysis and Approaches is for students who enjoy developing their mathematics to become fluent in the construction of mathematical arguments and develop strong skills in mathematical thinking. They will also be fascinated by exploring real and abstract applications of these ideas, with and without technology. Students who take this course will be those who enjoy the thrill of mathematical problem solving and generalisation.

This course recognises the need for analytical expertise in a world where innovation is increasingly dependent on a deep understanding of mathematics. This course includes topics that are both traditionally part of a pre-university mathematics course (for example, functions, trigonometry, calculus) as well as topics that are amenable to investigation, conjecture and proof, for instance the study of sequences and series at both SL and HL, and proof by induction at HL.

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 generalisation of these patterns. Students who wish to take this course 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.

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. The preferred calculator model will be available at the College Uniform Shop.

CONTENT

Mathematics: Analysis and Approaches SL and HL students study a common core syllabus as identified by the core topics listed below. HL students study further content from each topic area. The emphasis placed on each unit is indicated by the teaching hours identified.

Students engage in a range of mathematical exploration activities that mathematicians in the real world undertake to allow students time to develop the skill of thinking like a mathematician - in other words providing students with a mathematical toolkit which will allow them to approach any type of mathematical problem.

The core topics and hours of teaching focus for SL and HL studies is outlined in the following table.

Core Topics:

Topic	Standard Level (SL)		Higher Level (HL)	
	Teaching hours	Teaching hours (%)	Teaching hours	Teaching hours (%)
Number and Algebra	19	12	39	16
Functions	21	14	32	13
Geometry and Trigonometry	25	17	51	21
Statistics and Probability	27	18	33	14
Calculus	28	19	55	23
Mathematical Exploration / Toolkit	30	20	30	13
	Total Teaching: 150 hours		Total Teaching: 240 hours	

ASSESSMENT

Students are assessed for College progress grades throughout the IBDP and then a final grade is derived from the following components.

Internal assessment accounts for 20% of the total assessment.

- **Individual exploration.**

The individual investigation is a piece of written work that involves investigating an area of mathematics. This report is based on work completed over 10 - 15 hours. Maximum 12 – 20 pages. This component is internally assessed by the teacher and externally moderated by the IBO at the end of the course. The requirements for this component are the same for SL and HL students.

External assessment accounts for 80% of the total assessment.

This is derived from two/three separate examination papers:

- **Paper 1:** Compulsory short-response questions based on the syllabus. Calculators not permitted.
- **Paper 2:** Compulsory extended-response questions based on the syllabus. Calculators are required.
- **Paper 3: (HL Only)**
Two compulsory extended response problem-solving questions. Calculators are required.

A detailed breakdown of the external examination papers is outlined below.

Examination	Standard Level	Higher Level
Paper 1	Short-response questions based on the syllabus	Short-response questions based on the syllabus (SL and HL subtopics)
	1 hour 30 minutes 40% of final grade	2 hours 30% of final grade
Paper 2	Extended-response questions based on the syllabus	Short answer and extended response questions (SL and HL subtopics)
	1 hour 30 minutes 40% of final grade	2 hours 30% of final grade
Paper 3		Extended response problem-solving questions
		1 hour 20% of final grade

The two/three papers are completed in November of the second year of the course and are marked by external examiners.

GROUP 5: MATHEMATICS—APPLICATIONS AND INTERPRETATIONS

COURSE DETAILS

- **Subject: Group 5, Mathematics**
- **Level:** Standard Level (SL) or Higher Level (HL) are available.
- **Suggested Prior Achievement:** Grade A-B in Stage 5.3 Advanced Mathematics, or Grade A in Stage 5.2 Intermediate Mathematics.

COURSE DESCRIPTION

Mathematics has been described as the study of structure, order and relation that has evolved from the practices of counting, measuring and describing objects. Mathematics provides a unique language to describe, explore and communicate the nature of the world we live in as well as being a constantly building body of knowledge and truth in itself that is distinctive in its certainty.

Mathematics: 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 this course will be those who enjoy mathematics best when seen in a practical context.

This course recognises the increasing role that mathematics and technology play in a diverse range of fields in a data-rich world. As such, it emphasises the meaning of mathematics in context by focusing on topics that are often used as applications or in mathematical modelling. To give this understanding a firm base, this course also includes topics that are traditionally part of a pre-university mathematics course such as calculus and statistics. The course makes extensive use of technology to allow students to explore and construct mathematical models. Mathematics: Applications and Interpretation will develop mathematical thinking, often in the context of a practical problem and using technology to justify conjectures.

Students who choose Mathematics: Applications and Interpretation at SL or HL should enjoy seeing mathematics used in real-world contexts and to solve real-world problems. Students who wish to take this course at higher level will have good algebraic skills and experience of solving real-world problems. They will be students who get pleasure and satisfaction when exploring challenging problems and who are comfortable to undertake this exploration using technology.

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. The preferred calculator model will be available at the College Uniform Shop.

CONTENT

Mathematics: Analysis and Approaches SL and HL students study a common core syllabus as identified by the core topics listed below. HL students study further content from each topic area. The emphasis placed on each unit is indicated by the teaching hours identified.

Students engage in a range of mathematical exploration activities that mathematicians in the real world undertake to allow students time to develop the skill of thinking like a mathematician - in other words providing students with a mathematical toolkit which will allow them to approach any type of mathematical problem.

The core topics and hours of teaching focus for SL and HL studies is outlined in the following table.

Core Topics:

Topic	Standard Level (SL)		Higher Level (HL)	
	Teaching hours	Teaching hours (%)	Teaching hours	Teaching hours (%)
Number and Algebra	16	10	29	12
Functions	31	21	42	17
Geometry and Trigonometry	18	12	46	19
Statistics and Probability	36	24	52	22
Calculus	19	13	41	17
Mathematical Exploration / Toolkit	30	20	30	13
	Total Teaching: 150 hours		Total Teaching: 240 hours	

ASSESSMENTS

Students are assessed for College progress grades throughout the IBDP and then a final grade is derived from the following components.

Internal assessment accounts for 20% of the total assessment.

- **Individual exploration.**

The individual investigation is a piece of written work that involves investigating an area of mathematics. This report is based on work completed over 10 - 15 hours. Maximum 12 – 20 pages. This component is internally assessed by the teacher and externally moderated by the IBO at the end of the course. The requirements for this component are the same for SL and HL students.

External assessment accounts for 80% of the total assessment.

This is derived from two/three separate examination papers:

- **Paper 1:** Compulsory short-response questions based on the syllabus. Calculators are required.
- **Paper 2:** Compulsory extended-response questions based on the syllabus. Calculators are required.
- **Paper 3: (HL Only)**
Two compulsory extended response problem-solving questions. Calculators are required.

A detailed breakdown of the external examination papers is outlined below.

Examination	Standard Level	Higher Level
Paper 1	Short-response questions based on the syllabus	Short-response questions based on the syllabus (SL and HL subtopics)
	1 hour 30 minutes 40% of final grade	2 hours 30% of final grade
Paper 2	Extended-response questions based on the syllabus	Short answer and extended response questions (SL and HL subtopics)
	1 hour 30 minutes 40% of final grade	2 hours 30% of final grade
Paper 3		Extended response problem-solving questions
		1 hour 20% of final grade

The two/three papers are completed in November of the second year of the course and are marked by external examiners.

GROUP 6: MUSIC

COURSE DETAILS

- **Subject: Group 6, The Arts**
- **Level:** Standard Level (SL) or Higher Level (HL) are available.
- **Suggested Prior Achievement:** Grade A or B in Music, or a reasonable practical experience on an instrument.

COURSE DESCRIPTION

This is an immersive course in which students develop and nurture their musical identity through experimental learning. Music students build a deep and applied understanding of diverse musical material which they explore as performers, creators, researchers and curators of music from personal, local and global contexts. Students develop musical competencies and skills by taking on the musical roles of the contemporary musician as performers, creators, and researcher of music. A highly practical course, students learn through three musical processes: exploring, experimenting and presenting.

The course framework is intended to be used creatively to stimulate both students and teachers' imaginations. Specific works are not prescribing, nor are specific genres of music. Rather, the course encourages flexibility in the study of a wide range of music and exciting musical stimuli for their own work. This course integrates real life musical experiences in applied study of diverse musical material, fostering life-long purveyors and practitioners of music, who understand personal musical intent and the purpose of music around the globe.

CONTENT

Context, Areas of Inquiry, Roles, Processes

Students at both SL and HL level study of musical material from personal, local and global contexts. Students approach this study through four areas of inquiry:

- **Music for sociocultural and political expression** – This is music that expresses and communicates social/cultural ideas, traditions, messages. For example: protest songs, music for ritual, music for communication.
- **Music for listening and performing** – This is music created for aesthetic value. For example: classical music, jazz and experimental music.
- **Music technology in the electronic and digital age** – Music created electronically or digitally for a range of purposes. For example: Music for theatre, film, ballet, games.

Students explore these contexts and areas of inquiry from the viewpoint of three different roles:

- **The role of the performer** – Students develop skills in practical music-making and delivery, building technical proficiency and interpretation. They create and present portfolio of their own performances through recording and videos gathered through units of work throughout the course.

- **The role of the creator** – Students make music through composing, improvising and arranging. They learn to present their created work through recorded performances, digitally created tracks and appropriate forms of notation.
- **The role of the researcher** – Students learn to investigate music by listening, researching, analysing, playing and creating. They build an understanding of music and its place in history and culture. They present their knowledge through written reports, performances and compositions and explain their knowledge with subject-specific terminology.

In each of these roles, students learn through three processes:

- **Exploring music in context** – Students learn how to engage with a diverse range of music. Students will analyse musical material, explore unfamiliar contexts, extract information from primary and secondary sources, investigate how music is created and presented in many cultures, listen and respond to music from around the globe and throughout history.
- **Experimenting with music** – Students engage in practical activities such as performing and creating to build connections with theoretical explorations. They select and analyse musical stimuli, apply their knowledge, develop ideas through practice, and evaluate and reflect on their own music and that of others.
- **Presenting music** – students present their music through performance of their own work, performance of music by others, and the provision of programme notes and written commentaries. Students communicate, interpret, express, demonstrate and inform through the presentation of their work.

HL Only: The Contemporary Music Maker

Students studying at HL also plan, create and present a real-life music project.

GENERAL INFORMATION

Additional private music tuition the student's instrument of choice is highly recommended.

ASSESSMENT

Each student will develop and maintain a music journal during the course. The music journal will be the student's source of evidence for internal and external assessment. Students will not submit the entire journal for assessment, but will use the journal to gather and choose evidence for each assessment component.

Students are assessed for College progress grades throughout the IBDP and then a final grade is derived from the following components.

Internal assessment accounts for 30% in SL and 50% in HL of the total assessment.

- **Experimenting with music:** (30% in SL and 20% in HL)
Students submit an experimentation report with evidence of their musical processes in creating and performing in two areas of inquiry in a local and/or global context. The report provides a rationale and commentary for each process.

Students submit:

- a written experimentation report that supports the experimentation (maximum 1500 words)
- practical musical evidence of the experimentation process
 - three related excerpts of creating (total maximum 5 minutes)
 - three related excerpts of performing (total maximum 5 minutes)
- **The contemporary music-maker:** (30% HL only)
Students submit a continuous multimedia presentation documenting their real-life project. Students submit multimedia presentation (maximum 15 minutes), evidencing:
 - the project proposal
 - the process and evaluation
 - the realised project, or curated selections of it.
- **Group performing:** A recording selected from pieces presented during two or more public performances, 20–30 minutes (SL only).

External assessment comprises submissions. There is no external exam for this course. External assessment accounts for 70% in SL and 50% in HL of the total assessment. This is derived from two separate tasks completed over the two-year course:

- **Exploring music in context** (30% in SL and 20% in HL)
Students select samples of their work for a portfolio submission (maximum 2400 words). Students submit:
 - written work demonstrating engagement with, and understating of, diverse musical material
 - practical exercises:
 - creating: one creating exercise (score maximum 32 bars and/or audio 1 minute as appropriate to style)
 - performing: one performed adaptation of music from a local or global context for the student's own instrument (maximum 2 minutes)
 - supporting audio material (not assessed).
- **Presenting music** (40% in SL and 30% in HL)
Students submit a collection of works demonstrating engagement with diverse musical material from four areas of inquiry. The submission contains:
 - Presenting as a researcher
 - programme notes (600 words)
 - Presenting as a creator
 - composition and/or improvisation (maximum 6 minutes)
 - Presenting as a performer
 - solo and/or ensemble (maximum 12 minutes)
 - excerpts of solo role in an ensemble (only applicable if a student's presentation comprises only ensemble work – maximum 2 minutes)

GROUP 6: VISUAL ARTS

COURSE DETAILS

- **Subject: Group 6, The Arts**
- **Level:** Standard Level (SL) or Higher Level (HL) are available.
- **Suggested Prior Achievement:** Grade A or B in Visual Arts and/or Photography.

COURSE DESCRIPTION

Visual Arts encourages students to challenge their own creative and cultural expectations and boundaries. It is a thought-provoking course in which students develop analytical skills in problem-solving and divergent thinking, while working towards technical proficiency and confidence as art-makers. In addition to exploring and comparing visual arts from different perspectives and in different contexts, students are expected to engage in, experiment with and critically reflect upon a wide range of contemporary practices and media. The course is designed for students who want to go on to study visual arts in higher education as well as for those who are seeking lifelong enrichment through visual arts.

Through inquiry, investigation, reflection and creative application, Visual Arts students develop an appreciation for the expressive and aesthetic diversity in the world around them, becoming critically informed makers and consumers of visual culture.

CONTENT

The Visual Arts core syllabus at SL and HL consists of three equal interrelated areas:

- Visual arts in context – provides a lens through which students are encouraged to explore perspectives, theories and cultures that inform and influence visual arts practice. Students should be able to research, understand and appreciate a variety of contexts and traditions and be able to identify links between them.
- Visual arts methods – addresses ways of making artwork through the exploration and acquisition of skills, techniques and processes, and through engagement with a variety of media and methods.
- Communicating visual arts – involves students investigating, understanding and applying the processes involved in selecting work for exhibition and public display. It engages students in making decisions about the selection of their own work.

Students are required to investigate the core syllabus areas through exploration of the following practices:

- Theoretical practice
- Art-making practice
- Curatorial

Throughout the course students at both SL and HL are required to maintain a visual arts journal. This is their own record of the two years of study.

Throughout the course students are expected to experience working with a variety of different art-making and conceptual forms. This includes two-dimensional forms, three-dimensional forms and lens-based, electronic and screen based forms.

SL students should, as a minimum, experience working with at least two art-making forms, HL students should, as a minimum, experience working with at least three art-making forms, selected from a minimum of two key forms.

ASSESSMENT

Students are assessed for College progress grades throughout the IBDP and then a final grade is derived from the following components.

Internal assessment accounts for 40% of the total assessment.

- **Exhibition (40%)**

Students a selection of resolved artworks from their exhibition. The selected pieces should show evidence of their technical accomplishment during the visual arts course and an understanding of the use of materials, ideas and practices appropriate to visual communication.

SL students submit 4–7 artworks, a curatorial rationale and two photographs of their overall exhibition.

HL students submit 8–11 artworks, a curatorial rationale and two photographs of their overall exhibition.

External assessment accounts for 60% of the total assessment.

This is derived from two separate tasks completed over the two-year course:

- **Comparative Study (20%)**

Students analyse and compare different artworks by different artists. This independent critical and contextual investigation explores artworks, objects and artefacts from differing cultural contexts.

Students submit 10–15 screens which examine and compare at least three artworks, at least two of which should be by different artists. The work selected for comparison and analysis should come from contrasting contexts (local, national, international and/or intercultural).

HL students submit 3–5 additional screens which analyse the extent to which their work and practices have been influenced by the art and artists examined.

- **Process portfolio (40%)**

SL students submit 9–18 screens which evidence their sustained experimentation, exploration, manipulation and refinement of a variety of art-making activities. The submitted work must be in at least two art-making forms, each from separate columns of the art-making forms table.

HL students submit 13–25 screens which evidence their sustained experimentation, exploration, manipulation and refinement of a variety of art-making activities. The submitted work must have been created in at least three art-making forms, selected from a minimum of two columns of the art-making forms table.

ACKNOWLEDGEMENTS

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The IBDP content presented in this booklet has been prepared with permission from a range of documents produced by the International Baccalaureate Organisation.

For more information, go to the IBO website at www.ibo.org

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