

RANGITOTO COLLEGE



INTERNATIONAL BACCALAUREATE



SUBJECT SELECTION GUIDE

Updated: August 2022



Group 1: Language A (Native Language)

❖ *Literature - English*

This is an exciting and rigorous course in the study of literature. You will be reading across eras, countries, genres and author genders to form an international but truly personal view of the world through literature. You will explore literature critically through close reading, analytical writing, and deep discussion. Additionally, you will make connections between literary works, your personal experiences, and the world around you, and use that understanding to challenge old ways of thinking.

Available at **Standard** and **Higher** level:

Standard level: You will be required to study Nine literature texts

Higher level: You will be required to study Thirteen literature texts

Entry Requirements:

For both Standard and Higher levels, you need to be able to work independently and collaboratively, be well organised, an avid reader and enjoy discussing literature.

Standard level: NCEA level 1, Merit with some Achieved for both internal and external standards, IB MYP or PYP 3-5, or an equivalent satisfactory level from another curriculum.

Higher level: NCEA level 1 at only Merit and Excellence in both internals and externals. IB MYP or PYP 5-7, or an equivalent excellent level from another curriculum.

❖ *Self Taught Literature – Language of Choice*

1. Students can choose to study the Literature course in their mother tongue language. The course structure is the same as the English Literature course. Literature is available in any language.
2. This course requires the student to source a suitable teacher/tutor in their chosen language to support them. The teacher/tutor must have IB knowledge. The tutor can be living in New Zealand or abroad. IB Coordinator can provide assistance to source a tutor.
3. As such the Self Taught option requires students to be highly motivated, organised and capable of working well independently. This option requires approval from the IB Diploma Coordinator.

Available at: **Standard level** only.

❖ *Language and Literature – English or Mandarin*

This is a rigorous and diverse course for students to study in either English or Mandarin who have significant experience using English/Chinese in an academic context. The course involves the study of texts, both literary and non-literary, and provides a focus for developing an understanding of how language works to create meanings in a culture, as well as in particular texts. All texts may be understood according to their form, content, purpose and audience, and through the social, historical, cultural and workplace contexts that produce and value them.

Available at **Standard** and **Higher** level:

Standard level: You will be required to study four literature texts

Higher level: You will be required to study six literature texts

Entry Requirements:

For both Standard and Higher levels, you need to be able to work independently and collaboratively, be well organised, and enjoy discussing literature and aspects of language.

Standard level: **English** - NCEA level 1 at Merit with some Achieved either in internal or external standards, IB MYP/PYP 3-5, or an equivalent satisfactory level from another curriculum.

Mandarin – as mother tongue, ideally having completed 初三 (last year of junior high school) in a Mandarin working language school, or an equivalent fluency level.

Higher level: **English** - NCEA level 1 at only Merit and Excellence in both internals and externals. IB MYP or PYP 5-7, or an equivalent excellent level from another curriculum.

Mandarin – language as mother tongue and completed 初三 (last year of junior high school) in a Mandarin working language school, and able to cope with 高中 (higher secondary school) curriculum.



Group 2: Language B (Acquired Language)

❖ *French, Spanish, Mandarin, English, Japanese*

These language acquisition courses are designed to provide students with the necessary skills and intercultural understanding to enable them to communicate successfully in an environment where the language studied is spoken. All languages follow the same course. You will study five themes: Identity, Experiences, Human Ingenuity, Sharing the Planet, and Social Organisation. Students are assessed on four components: Oral, Reading, Writing and Listening.

Languages are available at **Ab Initio**, **Standard** and **Higher** level:

Ab-initio level (SL) is designed for students with little/no previous learning of the language.

Standard level (SL) is suitable for students who can understand the language.

Higher level (HL) is suitable for students who fluently speak the language.

Entry Requirements:

For both Standard and Higher levels, you need to be able to work independently and collaboratively, be well organised, an avid reader and enjoy discussing literature.

Ab-initio level: Nil.

Standard level: NCEA level 1 at Merit with some Achieved either in internals or externals.

Higher level: NCEA level 1 with Excellence in both internals and externals.



Group 3: Individuals and Societies

Business Management, Economics, Geography, History, Psychology

The study of individuals and societies, more commonly known as the human sciences or social sciences, explore the interactions between humans and their environment in time, space and place. In the social science courses you will be encouraged to develop an international perspective, concern for global issues, and raise awareness of your personal responsibilities at a local, national and international level.

❖ **Business Management**

The Business Management course is designed to develop your knowledge and understanding of business management theories, as well as your ability to apply a range of tools and techniques in an international setting. You will learn to analyse, discuss and evaluate business activities. The course explores the key characteristics of business organisation and environment and the business functions of human resource management, finance and accounts, marketing and operations management. Through the exploration of six underpinning concepts (change, culture, ethics, globalization, innovation and strategy), the course will enable you to develop a holistic understanding of today's complex and dynamic business environment. The conceptual learning is firmly anchored in business management theories, tools and techniques and placed in the context of real world examples and case studies. SL and HL students are presented with a common syllabus, with an HL extensions in all topics.

Available at **Standard** and **Higher** level

Entry Requirements:

Higher level: Achieved and Merits in NCEA level 1 English and/or Business Studies. No previous business experience is required, however, this is advantageous for HL.

❖ **Economics**

The study of Economics is essentially about dealing with scarcity, resource allocation and the methods and processes by which choices are made in the satisfaction of human wants. In this course you will apply theories of microeconomics, which deal with economic variables affecting individuals, firms and markets, and macroeconomics, which deals with economic variables affecting countries, governments and societies, how they are to be applied to real-world issues. Prominent among these issues are fluctuations in economic activity, international trade, economic development and environmental sustainability. Standard and HL students are presented with a common syllabus, with an HL extension in some topics.

Available at **Standard** and **Higher** level

Entry Requirements:

Higher level: Achieved and Merits in NCEA level 1 English and/or Economics. No previous economics experience is required, however, this is advantageous for HL.

❖ **Geography**

Geography is a dynamic course, firmly grounded in the real world and focussing on the interactions between individuals, societies and the physical environment. It seeks to identify trends and patterns in these interactions and examines the processes behind them. It also investigates the way that people adapt and respond to change and evaluates management strategies associated with such change. The course integrates both physical and human geography, and you will learn elements of both scientific and socio-economic methodologies.

Available at **Standard** and **Higher** level:

Students study a common core and optional themes.

Standard level: You will study two optional themes

Higher level: You will study three optional themes, providing further breadth and depth

Entry Requirements:

Higher level: Achieved and Merits in NCEA level 1 Geography and/or English. No previous Geography experience is required, however this would be advantageous for those taking the subject at Higher level.

❖ **History**

History is the process of recording, reconstructing and interpreting the past through the investigation of a variety of sources to enable students to gain an understanding of themselves and others in relation to the world, both past and present. The History course is an exploratory one that poses questions without providing definitive answers. The emphasis of the course is on world history and on making connections and comparisons between different region's cultures, political systems and national traditions. The two main key topics covered will be: autocratic leaders (Hitler, Stalin, Mao), and independence movements (Ireland, India, Zimbabwe). Students will focus on different case studies, and for your prescribed topic you will be required to consider sources in the context of Conflict and Intervention (Rwanda and Kosovo) or the move to Global War (Germany, Japan, Italy). Students who have chosen History at Higher level will study an additional regional history topic of Oceania and look at the impact of the Chinese Revolution in the 20th Century, the establishment of New Zealand and Australia as British colonies, and the impact of World War II in South East Asia.

Available at **Standard** and **Higher** level:

Standard level: Two key topics: Autocratic Leaders and Independence Movements

Higher level: Two key topics and an in-depth research-based study of your choice, related to a period of history and specific to a particular world region, centred around critical analysis of historical sources

Entry Requirements:

Higher level: Merits in NCEA level 1 English and/or History. No previous History experience is required, however this would be advantageous. An excellent standard of writing is required for those taking Higher level.

❖ **Psychology**

Psychology examines the interaction of biological, cognitive and socio-cultural influences on human behaviour. Students undertaking the course can expect to develop an understanding of how psychological knowledge is generated, developed and applied. This will allow students to have a greater understanding of themselves, and appreciate the diversity of human behaviour. The ethical concerns raised by the methodology and application of psychological research are also key considerations of the IB Psychology course.

Available at **Standard** and **Higher** level:

Students study a common core with:

Standard level: Studying one option in depth

Higher level: Studying two options in depth and qualitative research methodology

Entry Requirements:

Higher level: Merits and Excellence in NCEA level 1 English. An excellent standard of writing is required for those taking Higher level.



Group 4: Experimental Sciences

Biology, Chemistry, Physics

Through studying Biology, Chemistry or Physics, students will become aware of how scientists work and communicate with each other. While the scientific method may take on a wide variety of forms, it is the emphasis on a practical approach through experimental work that characterises the science subjects.

All Group 4 Sciences are available at **Standard** and **Higher** level:

Students study a common core with:

Standard level: Undertake a common core syllabus

Higher level: Students are required to study the core syllabus topics in greater breadth and depth, and are required to study ONE additional option topic

❖ **Biology**

Biology is the study of life. In the Biology course you will gain a greater understanding of the living world at all levels using many different approaches and techniques. At one end of the scale is the cell, its molecular construction and complex metabolic reactions. At the other end of the scale biologists investigate the interactions that make whole ecosystems function. In this course you will study six core topics: Cell Biology, Molecular Biology, Genetics, Ecology, Evolution & Biodiversity, and Human Physiology. If taken at Higher level you will go to greater depth learning about Nucleic Acids, Metabolism, Cell Respiration & Photosynthesis, Plant Biology, Evolution and Animal Physiology. Additionally, in consultation with your teacher, you will study one optional topic from: Human Physiology, Neurobiology & Behaviour, Biotechnology, or Ecology.

Entry Requirements:

Standard level: NCEA level 1 ideally with Merit or Excellence in all Biology standards. IB MYP/PYP 3-5, or equivalent satisfactory level from another curriculum.

Higher level: Double Science at NCEA level 1 with Merit and Excellence in all Biology internals and externals. IB MYP or PYP 5-7, or an equivalent excellent level from another curriculum.

❖ Chemistry

The Chemistry course combines academic study with the acquisition of practical and investigational skills. It is often called the central science, as chemical principles underpin both the physical environment in which we live and all biological systems. Apart from being a subject worthy of study in its own right, Chemistry is a prerequisite for many other courses in higher education, such as medicine, biological science and environmental science. During the Chemistry course you will learn the essential principles of the subject which include: Stoichiometric relationships, Atomic Structure, Periodicity, Chemical Bonding & Structure, Energetics, Chemical Kinetics, Equilibrium, Acids & Bases, Redox Processes and Organic Chemistry, as well as measurement, processing and analysis of data. At Higher level, in consultation with your teacher, you will also select an optional topic to study between Energy or Bio-chemistry.

Entry Requirements:

Standard level: Merit in Chemistry internal and external assessments at NCEA level 1. IB MYP/PYP 3-5, or equivalent satisfactory level from another curriculum.

Higher level: Excellence in all Chemistry internal and external assessments at NCEA level 1, and Merit and Excellence in Mathematics internals and externals at NCEA level 1. IB MYP or PYP 5-7, or an equivalent excellent level from another curriculum.

❖ Physics

Physics is the most fundamental of the experimental sciences, as it seeks to explain the universe itself, from the very smallest particles to the vast distances between galaxies. By studying Physics you will be provided with opportunities to develop manipulative skills, design investigations, collect data, analyse results, and evaluate and communicate your findings. During the Physics course you will learn the essential principles of the subject which include: Measurements and Uncertainties, Mechanics, Thermal Physics, Waves, Electricity & Magnetism, Circular Motion & Gravitation, Atomic, Nuclear & Particle Physics, and Energy Production. Those who embark on the Higher level course will also explore Wave Phenomena, Fields, Electromagnetic Induction, Quantum and Nuclear Physics, and in consultation with your teacher, you will also select one optional topic to study from these four options: Relativity, Engineering Physics, Imaging, Astrophysics.

Entry Requirements:

As a student of Physics you will be able to work independently, show initiative and actively partake in class discussions and questioning opportunities regularly.

Standard level: Merit or Excellence in Mechanics (90940) and Algebra (91027) at NCEA level 1. IB MYP/PYP 3-5, or equivalent satisfactory level from another curriculum.

Higher level: Double Science course, with Excellence in: Heat (90939), Electricity (90937), Mechanics (90940) and Algebra (91027) at NCEA level 1. IB MYP or PYP 5-7 for Mathematics and Science, or equivalent excellent levels from another curriculum.



Group 5: Mathematics

The nature of mathematics can be summarised in a number of ways. For example, it can be seen as a well-defined body of knowledge, as an abstract system of ideas, or as a useful tool. For many people it is probably a combination of these, but there is no doubt that mathematical knowledge provides an important key to understanding the world in which we live.

There are two Mathematics courses available to study.

❖ **Mathematics: Analysis and Approaches (AA)**

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 (HL and SL), and proof by induction (HL).

The course allows the use of technology, however there is a strong emphasis on the ability to construct, communicate and justify correct mathematical arguments.

Students who choose this course 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 HL will have strong algebraic skills and the ability to understand simple proof, enjoy spending time with problems and get pleasure and satisfaction from solving challenging problems.

Entry Requirements:

Standard level: 11MTE or 11 MTX course in year 11, with Merit or Achieved at NCEA for all level 1 standards.

Higher level: 12 MTX with Excellence and some Merits at NCEA level 1.

❖ **Mathematics: Interpretation & Application (AI)**

This course recognises the increasing role that mathematics and technology play in a diverse range of fields in a data-rich world. As such, the course makes extensive use of technology to allow students to explore and construct mathematical models. The focus is on developing mathematical thinking in the context of a practical problem, using technology to justify conjectures.

Students who choose this subject should enjoy seeing mathematics used in real-world contexts and to solve real-world problems. This course is offered at Standard Level only.

Entry Requirements:

Standard level: 11MTE or 11 MTX course in year 11, with Merit or Achieved for all NCEA level 1 standards.



Group 6: Arts/ Choice Group

We offer this group as a choice group.

Students choose a second subject from one of the following groups:

Group 1 - Language & Literature

Group 2 - Acquired Language

Group 3 - Individuals & Societies

Group 4 - Science



The Common CORE Subjects

❖ **Extended Essay (EE)**

The Extended Essay offers the opportunity for IB students to investigate a topic of special interest from one of the student's six Diploma Programme subjects and acquaints them with the independent research and writing skills expected at university. It is intended to promote high-level research and writing skills, intellectual discovery and creativity, resulting in an essay of 4000 words and equating to approximately 40 hours of work. This component of the CORE provides excellent preparation for necessary university writing tasks. Additionally, in countries where normally interviews are required prior to acceptance for employment or for a place at university, the extended essay has proved to be a valuable stimulus for discussion.

❖ **Theory of Knowledge (ToK)**

The interdisciplinary Theory of Knowledge course is intended to encourage students to reflect on the huge cultural shifts worldwide around the digital revolution and the information economy. The extent and impact of the changes vary greatly in different parts of the world, but everywhere their implications for knowledge are profound. Theory of Knowledge encourages critical thinking about knowledge itself and aims to help young people make sense of what they encounter. In this course students carry out activities and discussions, share ideas with others and listen to, and learn from, what others think, to help them discover and express their views on knowledge issues. In this process students' thinking and understanding of knowledge as a human construction, are shaped, enriched and deepened. Connections may be made between knowledge encountered in different Diploma Programme subjects, in creativity, action, service experience or in extended essay research. Distinctions between different kinds of knowledge may be clarified. Students are required to complete two assessment tasks: an essay and an exhibition. Both tasks have at their centre reflection on knowledge issues.

❖ **Creativity, Action, Service (CAS)**

Creativity, Action, Service is at the heart of the Diploma Programme, involving students in a range of activities which take place alongside their academic studies throughout the IB Diploma Programme. The component's three strands, often interwoven with particular activities, comprise of: *Creativity* – experiences that involve being creative, *Action* – physical activity contributing to a healthy lifestyle,

Service – an unpaid and voluntary exchange that has a learning benefit for the student. CAS encourages students to be involved in activities as individuals and as part of a team that take place in local, national and international contexts. The course enables students to enhance their personal and interpersonal development as well as their social and civic development, through experiential learning, lending an important counterbalance to the academic pressures of the rest of the IB. CAS is a pass/fail component. Students must pass CAS to gain their IB Diploma.