



# **IB Diploma Curriculum**

At Year 12, students have a choice of qualifications. They can choose to continue with NCEA or opt to follow the International Baccalaureate (IB) Diploma programme. By offering choice, students are able to select a pathway that is right for them as an individual. Whichever qualification they take, all Year 12 students choose six subjects.

# This section covers the course work for the IB Diploma.

Click here for information about the Year 12 or Year 13 NCEA Curriculum.

iploma students take **six** subjects. Students choose **one** subject from each of groups 1 to 6, thus ensuring breadth of experience in languages, social sciences, the experimental sciences, mathematics and the arts.

The IBO does give the students the option of not choosing a subject from Group 6. In such cases, the student may choose a second subject from another group.

Please note at Saint Kentigern College, students cannot choose 3 Diploma Sciences.

Three subjects are studied in depth at Higher Level (HL) and three at Standard Level (SL). Students will decide which subjects they will study at Higher Level at the end of the second term in Year 12.

In addition, the programme has three core requirements that are included to broaden the educational experience and challenge students to apply their knowledge and understanding. This requires the students to complete a course in the Theory of Knowledge (TOK), write a Formal Extended Essay (EE) and participate in Creativity, Activity and Service (CAS).

Please note a minimum number 8 students is required to create a standard alone class. Composite level classes may be offered but these are subject to resourcing.

# **IB DIPLOMA SUBJECTS**

# **Core Requirements**

Theory of Knowledge

The Extended Essay

Creativity, Activity, Service (CAS)

**Christian Education** 

# GROUP 1 – Studies in Language & Literature

English A: Literature

English A: Language & Literature

Chinese A: Language & Literature

# GROUP 2 – Language Acquisition

Chinese B

French B

Japanese B

Spanish B

Spanish B (ab-initio)

# GROUP 3 –

**Individuals & Societies** 

**Business Management** 

Economics Geography

History Psychology

# GROUP 4 – Experimental Sciences

Biology

Chemistry Physics

Sports, Exercise & Health Science

# **GROUP 5 – Mathematics**

Mathematics: Analysis & Approaches

Mathematics: Applications &

Interpretations

#### **GROUP 6 - The Arts**

Film Studies

Music

Theatre Arts

Visual Art

# **CORE REQUIREMENTS** (COMPULSORY)

At the heart of the IB Diploma are three compulsory requirements which all students must complete, Theory of Knowledge, Extended Essay, and Creativity, Activity and Service (CAS).

# **Christian Education** (Compulsory)

Contact: Dr J Sievers

#### Introduction

Christian values are an intrinsic part of the special character of Saint Kentigern College. All Year 12 and 13 students take Christian Education.

The Christian Education Department is constantly evolving its programmes to ensure that they are interesting, relevant and challenging for our students in their development as young men and women on their faith journeys, whatever they perceive that to be. In the Senior School, a wide range of relevant and contemporary resources are used in what is generally an informal, discussion-based, non-assessed theological and philosophical exploration of issues of Christian life and faith.

#### Course Outline

The Year 12 course aims to encourage students to continue exploring the foundational principles of the Christian life in deeper and increasingly more relevant ways. With the focus being on 'bringing joy to others', students will revisit the Jesus story, as well as key events in the history of the Christian church to consider not only what their own aspirations and achievements are, but also what they might achieve for others and inspire in others.

At Year 13 the aim of the course is to further build upon and enhance students' awareness and understanding of the Judeo/ Christian view of life and living, and thus to equip them to interface with the world outside the constraints and special nature of the Saint Kentigern College community.

With the Ten Commandments as the scriptural basis, the special character of Saint Kentigern College as the context, and supported by a wide range of contemporary resources, students will be encouraged to participate in an in-depth exploration of morality, conscience and, more specifically, issues of morality that will impact upon students' lives at some point.

## Assessment

There is no formal assessment for this course.

# Creativity, Activity, Service (CAS) (Compulsory)

Contact: Ms S Tornquist

The aim of Creativity, Activity, Service (CAS) is to foster responsible, compassionate citizens by encouraging their participation in artistic activities, sports, expeditions and service projects.

The three strands of CAS are characterised as follows:

**CREATIVITY** Arts, and other experiences that involve

creative thinking.

**ACTIVITY** Physical exertion contributing to a healthy

lifestyle, complementing academic work

elsewhere in the Diploma.

**SERVICE** An unpaid and voluntary exchange that has

a learning benefit for the student. The rights, dignity and autonomy of all those involved are

respected.

CAS enables students to enhance their personal and interpersonal development through experiential learning. At the same time, it provides an important counterbalance to the academic pressures of the rest of the Diploma.

For student development to occur, CAS should involve:

- Real, purposeful activities with significant outcomes
- Personal challenge tasks must extend the student and be achievable in scope
- Thoughtful consideration such as planning, reviewing progress and reporting
- Reflection on outcomes and personal learning

All proposed CAS activities need to meet these four criteria. It is also essential that they do not replicate other parts of the student's IB Diploma work.

Successful completion of CAS is a requirement for the award of the IB Diploma. CAS is not formally assessed but students need to document their activities and provide evidence that they have achieved seven key learning outcomes.

# The Extended Essay (Compulsory)

Contact: Ms C Pienaai

The Extended Essay is an in-depth study of a focused topic chosen from the list of approved Diploma subjects — usually one of the student's six chosen subjects for the IB Diploma. This part of the programme focuses on analysis, evaluation and reasoning. It provides students with an opportunity to engage in personal independent research on a topic of their own choice, under the guidance of a supervisor (a teacher in the school). 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 IB subject chosen. In the Diploma, the Extended Essay is the prime example of a piece of work where the student has the opportunity to show knowledge, understanding and enthusiasm about a topic of his or her choice.

# **ASSESSMENT**

The Extended Essay is assessed externally against common generic criteria, interpreted in ways appropriate to each subject.

In combination with the grade for Theory of Knowledge, it contributes up to three points to the total score for the IB Diploma.

The Extended Essay is presented as a formal piece of structured writing containing no more than 4,000 words; the result of approximately 40 hours of work by the student. Three mandatory reflective statements are written over the writing period of the Essay.

# Theory of Knowledge (Compulsory)

Contact: Dr H Kem

The Theory of Knowledge course is a fundamental part of the Diploma. It is a course of interdisciplinary study that challenges students to think critically about knowledge itself. It poses questions such as:

How do we know? What counts as knowledge? What is the value of knowledge? How does it grow? What are its limits? Who owns knowledge? What are the implications of having, or not having knowledge?

The course encourages students to:

- Reflect critically on diverse ways of knowing and on areas of knowledge
- Consider the role and nature of knowledge in their own culture, in the cultures of others and in the wider world

The course is organised in four broad categories with linking questions:

- Knowledge issues
- Knowers and knowing
- Ways of knowing
- Areas of knowledge

A successful TOK course will build on the student's own experience and involve them to explore the values of curiosity, thoughtful inquiry and critical thought.

### THEORY OF KNOWLEDGE ASSESSMENT

There is no examination in TOK. However, students are required to complete a TOK essay from a list of prescribed titles. The TOK essay is externally assessed. Students must also complete a TOK exhibition which is internally assessed but externally moderated.

	Theory of Knowledge					
Extended Essay	Excellent A	Good B	Satisfactory C	Mediocre D	Elementary E	Not Submitted
Excellent A	3	3	2	2	Ν	N
Good B	3	2	2	1	Ν	N
Satisfactory C	2	2	1	0	Ν	N
Mediocre D	2	1	0	0	Ν	N
Elementary E	Ν	Ν	Ν	Ζ	Ν	N
Not Submitted	Ν	Ν	Ν	Ν	Ν	N

# **GROUP 1 (STUDIES IN LANGUAGE & LITERATURE)**

Subject choices in Group 1 are Studies in English A: Literature, English A: Language and Literature and Chinese A: Language and Literature

# Chinese A: Language & Literature

Contact: Ms T Yan

# **Entry Requirement**

To take this course, students need to meet the following criteria:

- 1. Native speaker of Chinese
- 2. Experienced in using Chinese in an academic context, having had at least 6 years of 语文/國文 (Chinese Language and Literature) education.

The final decision is made upon interviews by the Chinese A teacher.

#### Introduction

The Chinese A: Language and Literature course aims to develop students' skills of textual analysis and the understanding that texts, both literary and non-literary, can be seen as autonomous yet simultaneously related to culturally determined reading practices.

The course comprises four parts – two relate to the study of language and two to the study of literature. The skills of analysis are practised to enable students to show their appreciation of previously unseen texts as well as their knowledge and understanding of texts studies in classes.

#### Course Outline

Both HL and SL courses consist of four parts:

- Language in cultural context
- Language and mass communication
- Literature texts and contexts
- Literature critical study

### **ASSESSMENT**

Students will be assessed externally and internally at both HL and SL.

Standard Level Assessment			
External Assessment			
Written Paper 1 Textual Analysis	25%		
Written Paper 2 Essay	25%		
Written Tasks	20%		
Internal Assessment 30%			
Individual Oral Commentary	15%		
Further Oral Activity	15%		

Higher Level Assessment				
External Assessm	External Assessment 70%			
Written Paper 1	Comparative Textual Analysis	25%		
Written Paper 2	Essay	25%		
Written Tasks		20%		
Internal Assessment 30%				
Individual Oral Commentary		15%		
Further Oral Activity		15%		

# **English A: Language & Literature**

Contact: Ms | Wordsworth

## **Entry Requirement**

14 Credits at NCEA Level 1 including a writing assessment, either Formal (AS90053) or Creative (AS90052).

#### Introduction

The English A: Language and Literature course involves the study of language in cultural context, language and mass communication, and literature from a variety of cultural backgrounds over a broad period of time. The course is designed to: develop in students, the ability to engage in close detailed analysis of individual texts and make relevant connections with them and between them; develop students' power of expression both in oral and written communication; encourage students to appreciate the formal, stylistic and aesthetic qualities of the texts and think critically about the different interactions between text, audience and purpose.

#### Course Outline

Higher Level students study 13 works. Standard Level students study 9 works. Works include texts in translation such as novels and plays. New Zealand texts are also included in the course.

The language units are: language in cultural context and language and mass communication.

Concepts covered in the syllabus include: identity, culture, creativity, communication, perspective, transformation and representation.

# **ASSESSMENT**

Students will be assessed externally and internally at both Higher and Standard Levels.

Standard Level Assessment				
External Assessment		70%		
Written Paper 1	Guided Textual Analysis	35%		
Written Paper 2	Comparative Essay	35%		
Internal Assessment 30				

Higher Level Assessment			
External Assessment 80%			
Written Paper 1	Guided Textual Analysis	35%	
Written Paper 2	Comparative Essay	25%	
Higher Level Essay		20%	
Internal Assessment 20%			

# **English A: Literature**

# **Entry Requirement**

14 Credits at NCEA Level 1 including a writing assessment, either Formal (AS90053) or Creative (AS90052).

### Introduction

The English A: Literature course involves the study of literature from a variety of cultural backgrounds over a broad period of time

Texts are selected from a range of genre and, through an emphasis on cultural awareness, students gain an appreciation of people and issues outside of their immediate experience. The English A: Literature course requires students to dedicate time to reading literature and responding to it verbally and in writing. The skills of analysis are practised to enable students to show their appreciation of previously unseen texts as well as their knowledge and understanding of texts studied in class.

There is an emphasis on discussion and verbal commentaries in order to equip students for assessment in formal oral situations.

#### Course Outline

Higher Level students study 13 texts. Standard Level students study 9 texts. Works include texts in translation, such as novels and plays. Poetry, autobiography and short stories including New Zealand texts are also included in the course. Concepts covered in the syllabus include: identity, culture, creativity, communication, perspective, transformation and representation.

### **ASSESSMENT**

Students will be assessed externally and internally at both Higher and Standard Levels.

Standard Level As	ssessment	
External Assessm	ent	70%
Written Paper 1	Guided Literary Analysis	35%
Written Paper 2	Comparative Essay	35%
Internal Assessme	ent	30%

Higher Level Assessment				
External Assessment 80%				
Written Paper 1	Guided Literary Analysis	35%		
Written Paper 2	Comparative Essay	25%		
Higher Level Essay		20%		
Internal Assessment 20%				

# **GROUP 2 (LANGUAGE ACQUISITION)**

At Saint Kentigern College, Chinese, French, Japanese and Spanish are offered in Group 2. For those students who have not previously studied a language, or who may have previously studied a language but not met the entry requirements for other learned languages in Group 2, Spanish is offered in 'ab initio' (Latin phrase meaning: "from the beginning").

Please note the IBO has strict rules regarding Lanaguge levels (either Standard or Higher). In Accordance with those rules, Langauge teachers will assess each student's capabilties and assign a Standard or Higher course to the each student.

Chinese B Contact: Ms T Yan

# **Entry Requirement**

19 credits or more in NCEA Level 1 Chinese and achieved at least one Excellence grade in each of the Internal and External Achievement Standards at Level 1.

If Chinese is the student's heritage language, it is restricted to students who have not undergone a significant, formal course of study in, or of Chinese.

Students must have completed the last three years of study in a school in which that Chinese was not the first language. This would include all students who have attended Saint Kentigern College since the beginning of Year 9.

Students may have studied or been taught in a different dialect of Chinese.

Entry to the Chinese B course is at the discretion of the Teacher in Charge of Chinese.

#### Introduction

Chinese is the most widely spoken language in the world. Because of the large, prosperous economy and the developing trading relationship with New Zealand, it is currently an important and very popular foreign language to learn. This Chinese course aims to give students an advantage in the increasingly competitive business world incorporating the skills of reading, writing and speaking, with the receptive skill of listening. It develops the student's understanding of Chinese culture and lifestyle in the 21st century.

#### Course Outline

Standard and High Level Chinese consists of a combination of internally assessed speaking, and externally assessed Reading, Writing and Listening.

The themes for study include:

- Identities
- Social Organisation
- Experiences
- Sharing the Planet
- · Human Ingenuity

### **ASSESSMENT**

Standard Level and High Level Assessment				
External Assessment				
Written Paper 1	Writing	25%		
Written Paper 2	Listening and Reading	50%		
Internal Assessment		25%		
Individual Oral		25%		

French B Contact: Mr R Barnao

# **Entry Requirement**

19 credits or more in NCEA Level 1 French.

This course is especially suitable for students with an 'M' endorsement or higher, at Level 1.

#### Introduction

French is spoken widely in the world and while already a popular subject for New Zealand students, it continues to be an increasingly important and relevant foreign language to learn. This French course incorporates the skills of reading, writing and speaking with the passive skill of listening. It aims to give students a sound understanding of French culture and lifestyle in the 21st century.

### Course Outline

The Standard Level course (Higher Level will only be offered at the discretion of the Teacher in Charge) consists of a combination of internally assessed Speaking, and externally assessed Reading, Writing and Listening The themes for study include:

- Identities
- Social Organisation
- Experiences
- Sharing the Planet
- · Human Ingenuity

## **ASSESSMENT**

Standard Level and High Level Assessment				
External Assessment 75%				
Written Paper 1	Writing	25%		
Written Paper 2	Listening and Reading	50%		
Internal Assessme	nt	25%		
Individual Oral		25%		

Japanese B Contact: Mrs C Leishman

# **Entry Requirement**

19 credits in NCEA Level 1 Japanese. Students must also have achieved an Excellence grade in ONE of the External Achievement Standards (1.1 or 1.4) and ONE of the Internal Achievement Standards (1.2 or 1.5) at Level 1.

#### Introduction

Japanese remains an important economic power in the world today – a leader in technology as well as being a major trading partner for New Zealand therefore is currently an important and popular foreign language to learn. This Japanese course incorporates the skills of reading, writing and speaking with the passive skill of listening. It aims to give students a sound understanding of Japanese culture and lifestyle in the 21st century.

# Course Outline

Standard Level Japanese (Higher Level will not be offered). Assessment consists of a combination of internally assessed Speaking, and externally assessed Reading, Writing and Listening (with a specific emphasis on kanji).

The themes for study include:

- Identities
- Social Organisation
- Experiences
- Sharing the Planet
- · Human Ingenuity

Standard Level and High Level Assessment				
External Assessment 75%				
Written Paper 1	Writing	25%		
Written Paper 2	Listening and Reading	50%		
Internal Assessment 25%				
Individual Oral				

Spanish B Contact: Mrs M Martinez

### **Entry Requirement**

19 credits or more in NCEA Level 1 Spanish. This course is especially suitable for students with an 'M' endorsement or higher at Level 1.

### Introduction

Spain and South America are becoming major trading partners for New Zealand and therefore Spanish is increasingly an important and popular foreign language to learn. This Spanish course incorporates the skills of reading, writing, speaking and listening. It aims to give students a sound understanding of Spanish culture and lifestyle in the 21st century.

### Course Outline

The Standard Level course (Higher Level will only be offered at the discretion of the Teacher in Charge) consists of a combination of internally assessed Speaking, and externally assessed Reading, Writing and Listening.

The themes for study include:

- Identities
- Social Organisation
- Experiences
- · Sharing the Planet
- Human Ingenuity

### **ASSESSMENT**

Standard Level and High Level Assessment				
External Assessm	ent	75%		
Written Paper 1	Writing	25%		
Written Paper 2	Listening and Reading	50%		
Internal Assessment Internally Assessed by the teacher and externally moderated by the IB  25%				
Individual Oral		25%		

# Spanish B (ab-initio)

Contact: Mrs M Martinez

## **Entry Requirement**

None.

This course is for those students who have not previously studied a language, or who may have previously studied a language but not met the entry criteria for the other Group 2 languages. "Ab-initio" means 'from the beginning' (Latin).

#### Introduction

Spain and South America are becoming major trading partners for New Zealand and therefore Spanish is increasingly an important and popular foreign language to learn. This Spanish course incorporates the skills of reading, writing, speaking and listening. It aims to give students a sound understanding of Spanish culture and lifestyle in the 21st century.

# Course Outline

While this is a beginners course in Spanish, students will be expected to reach a standard equivalent to Year 12 NCEA level, by the end of their second year. An extended vocabulary list required for the reading and listening assessments will be issued at the beginning of the course.

### Themes:

- Identities
- Experiences
- Human Ingenuity
- Social Organisation
- · Sharing the Planet

# **ASSESSMENT**

ab-Initio Assessment				
External Assessm	nent	75%		
Written Paper 1	Writing	25%		
Written Paper 2 Receptive Skills – listening and reading		50%		
Internal		25%		
Individual Oral		25%		

# **GROUP 3 (INDIVIDUALS & SOCIETIES)**

Subject choices in Group 3 are Business Management, Economics, Geography, History and Psychology.

# **Business Management**

Contact: Mrs T Ramakers

### **Entry Requirement**

A minimum of 14 credits from NCEA Level 1 Achievement Standards in Accounting, Business and/or Economics.

#### Introduction

Business Management is a rigorous and dynamic discipline that examines business functions, management processes and decision making in contemporary business contexts. It also considers business decisions that are influenced by internal and external factors and how these decisions impact upon its stakeholders.

### Course Outline

The aim is to help students understand the implications of business activity in a global market.

It is designed to give students an international perspective of business and to promote their appreciation of cultural diversity through the study of the topics; Business Organisation and their environment, Marketing, Human Resource Management, Finance and Accounts and Operations Management. In addition, the following six concepts underpin the course and are integrated throughout all learning – Change, Culture, Ethics, Globalisation, Innovation and Strategy.

Overall the Business Management course will contribute to students' development as critical and effective participants in local and world affairs and develop skills that are relevant to today's students.

# **ASSESSMENT**

Students will sit two external examinations and write one internal assessment for both Standard Level and Higher Level courses.

External Assessm	nent	75%
Written Paper 1	A series of short answer questions based on a case study that is issued in the second year of the course	30%
Written Paper 2	A series of short answer questions and one extended response based on stimulus material provided in the examination covering all course material and the underlying CUEGIS concepts.	45%
Internal Assessment – A written commentary based on three to five supporting documents about a real issue or problem facing aparticular organisation.  25%		

Higher Level Assessment		
External Assessm	nent	75%
Written Paper 1	A series of short answer questions and one extended response based on a case study that is issued in the second year of the course	35%
Written Paper 2	A series of short answer questions and one extended response based on stimulus material provided in theexamination covering all course material and the underlying CUEGIS concepts.	40%
enables students to of their skills and k	ent – A research project that o demonstrate the application nowledge in business al organisation issues or	25%

**Economics** Contact: Mr E Aldiss

# **Entry Requirement**

A minimum of 14 credits from the NCEA Level 1 Achievement Standards in Economics.

For those students who have not previously studied Economics but who wish to enter IB Diploma Economics, credits obtained in English and Mathematics will be used as the basis for entry.

#### Introduction

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

The economics course encourages students to consider ethical dimensions and perspectives, foster a concern for global issues and raise awareness of their own responsibilities at a local, national and international level.

The course also seeks to develop values and attitudes that will enable students to achieve a degree of personal commitment in trying to resolve these issues, appreciating our shared responsibility as citizens of an increasingly interdependent world.

#### Course Outline

Introduction to Economics

- Micro-economics
- Macro-economics
- International Economics
- Development Economics

#### **ASSESSMENT**

Standard Level Assessment		
External Assessm	ent	80%
Written Paper 1	Two extended response questions	40%
Written Paper 2	Two data response questions	40%
Internal Assessment		20%

Higher Level Assessment			
External Assessment		80%	
Written Paper 1	Two extended response questions	30%	
Written Paper 2	Two data response questions	30%	
Written Paper 3	Two quantitative method questions	20%	
Internal Assessment		20%	

Geography Contact: Mr R McCallum

# **Entry Requirement**

There is no specific entry requirement for IB Geography as skills needed are developed within the course however it is preferable and advantageous for students to have some understanding of Geography from Level 1 and an awareness of current global issues.

#### Introduction

The topics covered in Geography are related to real-world current issues that are relevant to present day and future societies and that consider the interactions between people and the physical environment.

Geography looks at ways people in different cultures have brought about changes through their interaction with the natural world and how our growth as a species is creating some significant global issues. It also investigates the way people adapt and respond to change and evaluates management strategies associated with such change through a range of international and local case studies.

The Diploma Programme Geography course integrates both physical and human geography and ensures students acquire elements of both scientific and socio-economic methodologies. The course starts at Year 12, includes one internal assessment, and ends with the examinations at the end of Year 13. Geography can be continued as a Humanity or Science subject at University.

# Additional Course Costs & Special Requirements

Field trips are part of the Geography course. There are additional costs associated with these.

#### Course Outline

Higher and Standard Level Geography course common themes.

### Part 1 – Geographic Themes

There are seven options. Options may vary from year to year, but are selected from:

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

Two options are studied at Standard Level.

Three options are studied at Higher Level.

### Part 2 - Core

The focus of the Core syllabus is 'Geographic Perspectives and Global Change'. Topics studied include:

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

# Part 2 - Higher Level Core Extension

The focus of the Higher Level Core Extension is 'Global Interactions'. Topics include:

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

### **ASSESSMENT**

Standard Level Assessment		
External Assessment		75%
Written Paper 1 (Geographic Themes)	Each option has one structured question and one extended answer question from a choice of two.  Total of 40 marks	35%
Written Paper 2 (Core)	Section A: Three structured questions (30 marks)  Section B: Infographic or visual stimulus with structured questions (10 marks)  Section C: One extended answer from a choice of two (10 marks)  Total 50 marks	40%
Internal Assessment		25%

Higher Level Assessment		
External Assessment		80%
Written Paper 1 (Geographic Themes)	Each option has one structured question and one extended answer question from a choice of two.  Total of 60 marks	35%
Written Paper 2 (Core)	Section A: Three structured questions (30 marks)  Section B: Infographic or visual stimulus with structured questions (10 marks)  Section C: One extended answer from a choice of two questions (10 marks)  Total 50 marks	25%
Written Paper 3 (Higher Level Core Extension)	Students answer one extended answer questions from a choice of three.  Total 28 marks	20%
Internal Assessment		20%

**History** Contact: Mrs N Burridge

# **Entry Requirement**

16 Credits or more in NCEA Level 1 History (this must include AS91005).

For those students who have not previously studied History but who wish to enter IB Diploma History, credits obtained in another Social Science subject will be used as the basis for entry.

### Introduction

IB Diploma History is concerned with individuals and societies in the widest context: political, social, economic, religious, technological and cultural. It contributes to students' understanding of their culture, heritage and identity in a global and international context. The course seeks to enable our students to understand the world around them from an international perspective. In understanding the past, our students can have a better understanding of the future and how that may be shaped by good global citizens.

# Course Outline

# Higher and Standard Level History Course Common Themes Paper 1

 The move to global war: Japanese, German and Italian expansion 1931 – 41

### Paper 2

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

# Higher Level History Course only Paper 3

- History of Europe; includes
  - Europe and the First World War (1871-1918)
  - Inter-war domestic developments in European states (1918-1939)
  - Diplomacy in Europe (1919-1945)

### **ASSESSMENT**

Students will be assessed externally and internally at both Higher and Standard Levels.

Standard Level Assessment			
External Assessment		75%	
Written Paper 1	A document based paper on a prescribed subject	30%	
Written Paper 2	An essay paper based on 20th century world history topics	45%	
Internal Assessment		25%	

Higher Level Assessment			
External Assessment		80%	
Written Paper 1	A document based paper on a prescribed subject	20%	
Written Paper 2	An essay paper based on 20th century world history topics	25%	
Written Paper 3	An essay paper based on regional options	35%	
Internal Assessment		20%	

Psychology Contact: Ms S Tornquist

# **Entry Requirement**

A minimum of 12 credits in NCEA Level 1 Science and 14 credits in a NCEA Level 1 Humanities Subject.

For those students who have not previously studied a Humanities subject in NCEA but who wish to enter IB Diploma Psychology, credits obtained in Science and English will be used as basis for entry.

#### Introduction

Psychology a social science forming part of Group 3. It is the rigorous and systematic study of mental processes and behaviour. It is a complex subject which draws on concepts, methods and understandings from a number of different disciplines.

The course looks at the study of behaviour and mental processes requiring a multidisciplinary approach and the use of a variety of research techniques.

### Course Outline

At the core of the DP psychology course is an introduction to three different approaches to understanding behaviour:

- biological approach to understanding behaviour
- · cognitive approach to understanding behaviour
- · sociocultural approach to understanding behaviour

There is a choice of options in the course. They focus on areas of applied psychology:

- abnormal psychology
- developmental psychology
- health psychology
- psychology of relationships

# **ASSESSMENT**

Standard Level Assessment		
External Assessment		75%
Written 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	50%
Written Paper 2	One question from a choice of three on one option	25%
Internal Assessment		25%

Higher Level Assessment		
External Assessment		80%
Written 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	40%
Written Paper 2	Two question from a choice of three on two options	20%
Written Paper 3	Three short-answer questions	20%
Internal Assessment		20%

# **GROUP 4 (EXPERIMENTAL SCIENCES)**

Subject choices in Group 4 are Biology, Chemistry and Physics.

Biology Contact: Ms S Tornquis

# **Entry Requirement**

A minimum of 16 credits in NCEA Level 1 Science including Genetics AS90948 at the Merit level or a minimum of 16 credits in Level 1 Biology.

### Introduction

The IB Biology course will enable students to develop a greater understanding of biological facts together with an appreciation of their significance in new and changing situations. They will develop greater expertise in the area of practical work and the link between theory and experimental work.

Students can continue to enjoy and further develop a personal interest in living organisms as well as learn to recognise the responsible use of biology and biotechnology within international scientific organisations.

The course encourages the use of ICT to develop information and communication technology skills in the study of Biology.

#### Course Outline

The two year course comprises of:

- Ecology
- Genetics
- Molecular Biology
- Plant Science (Higher Level only)
- Animal Physiology (Higher Level only)
- Cell Biology
- Evolution and Biodiversity
- Human Physiology
- Energy in Cells (Higher Level only)
- Plus an additional option topic

### **ASSESSMENT**

Students will be assessed externally and internally at both Higher and Standard Levels..

Standard Level Assessment		
External Assessment		80%
Written Paper 1	30 multiple choice questions on core content	20%
Written Paper 2	Data based questions, short answer and extended response questions	40%
Written Paper 3	Short answers based on one option studied and experimental skills and techniques.	20%
Internal Assessment		20%

Higher Level Assessment			
External Assessment		80%	
Written Paper 1	40 multiple choice questions on core content	20%	
Written Paper 2	Data based questions, short answer and extended response questions	36%	
Written Paper 3	Short answers based on one option studied and experimental skills and techniques.	24%	
Internal Assessment		20%	

Chemistry Contact: Mrs S Mellsop

### Recommendation for successful outcomes:

A minimum of 16 credits in NCEA Level 1 Science including achieving Acids and Bases, AS90944, at Merit or higher, or a minimum of 16 credits in Level 1 Chemistry.

### Introduction

IB Chemistry is the study of the composition, properties, and reactions of matter, particularly at the level of atoms and molecules. It is the branch of science concerned with the investigation of the properties and reactions of substances, and the use of such reactions to form new compounds. In the process of studying such reactions and properties, the IB chemistry course serves to make links between both Physics and Biology. Students, as always, need to have inquiring minds, be able to face challenges, acknowledge and build upon achievements of others, be innovative and be prepared to take calculated risks in their problem solving.

#### Course Outline

The two year course comprises of:

- Quantitative Chemistry
- Periodicity
- Equilibrium
- · Oxidation and reduction
- · Uncertainty and error in measurement
- Atomic structure and bonding
- Energetics and kinetics
- · Acids and bases
- Organic Chemistry
- Plus an additional option topic

### **ASSESSMENT**

Internal Assessment is an integral part of the course and is compulsory for both HL and SL students. Each student will carry out an individual investigation enabling them to demonstrate the application of their skills and knowledge and to pursue their personal interests.

Standard Level As	ssessment	
External Assessm	ent	80%
Written Paper 1	30 multiple choice questions on core content	20%
Written Paper 2	Short-answer questions and an extended answer question on the core	40%
Written Paper 3	Questions on core and SL option material	20%
Internal Assessme	ent	20%

Higher Level Asse	essment	
External Assessm	ent	80%
Written Paper 1	40 multiple choice questions on core content	20%
Written Paper 2	Short-answer and extended response questions on the core and AHL material	36%
Written Paper 3	Questions on core, AHL and option material	24%
Internal Assessme	ent	20%

Physics Contact: Mr J Naude

# **Entry Requirement**

NCEA Level 1 Science Endorsement with Merit or higher including Merit or higher in AS90940. NCEA Level 1 Mathematics with Merit Endorsement or higher including Merit or higher in Algebra AS91027.

Students who anticipate taking the advanced Higher Level (HL) course in Physics may find it an advantage to also have taken NCEA Level 1 Physics.

#### Introduction

IB Physics is offered at Standard Level (SL) and Higher Level (HL) and therefore accommodates students who wish to study Physics as their major subject in higher education along with those who have a strong interest in Physics.

Physics is the most fundamental of the experimental sciences, as it seeks to explain the universe itself from the very smallest particles, currently accepted as quarks, which may be truly fundamental to the vast distances between galaxies.

Through studying this course, not only will students expand their existing Physics knowledge, they will also develop and apply problem solving techniques, investigative skills as well as collaborative and communication skills.

#### Course Outline

The two year course comprises of:

- Mechanics
- Waves
- Atomic and Nuclear Physics
- Energy Production
- Thermal Physics
- Electricity and Electromagnetism
- Quantum Physics

# Additional Course Costs & Special Requirements

Write-on notes

### **ASSESSMENT**

Students will be assessed externally and internally at both Higher and Standard Levels.

Standard Level As	ssessment	
External Assessm	ent	80%
Written Paper 1	Multiple-choice questions based on the core topics	20%
Written Paper 2	Extended-response questions on the core topics	40%
Written Paper 3	Several short-answer questions on experimental work and extended response questions from one option	20%
Internal Assessme	ent	20%

Higher Level Asso	essment	
External Assessm	nent	80%
Written Paper 1	Multiple-choice questions based on the core and AHL topics	20%
Written Paper 2	Extended-response questions on the core and the AHL topics	36%
Written Paper 3	Several short-answer questions on experimental work and extended response questions from one option	24%
Internal Assessm	ent	20%

# **Sport, Exercise & Health Science**

Contact: Mr P Bennett

# **Entry Requirement**

14 credits in Level 1 Science.

#### Introduction

Sports, Exercise and Health Science (SEHS) is an experimental science that combines academic study with the acquisition of practical and investigative skills.

Aspects of biological and physical science is studied in the specific context of sports, exercise and health. The course incorporates the traditional disciplines of anatomy and physiology, biomechanics, psychology and nutrition.

### Course Outline

The two year course covers;

#### Standard Level

- Anatomy
- Exercise physiology
- Energy systems
- Movement analysis
  - Skill in sports
- Measurement and evaluation of human performance

#### Higher Level

- Further anatomy
- The endocrine System
- Fatigue
- Friction and drag
- Skill acquisition and analysis
- Genetics and athletic performance
- Exercise and immunity

# **ASSESSMENT**

Students will be assessed externally and internally at both Higher and Standard Levels.

Standard Level As	ssessment	
External Assessm	ent	80%
Written Paper 1	30 Multiple choice questions on core connect	20%
Written Paper 2	Section A: One data- based question and several short-answer questions on standard level content.	35%
Written Paper 3	Several short-answer questions in each of the options studied	25%
Internal Assessme	ent	20%
Individual investigation into a research topic of their choosing		20%

Higher Level Asse	essment	
External Assessm	ent	80%
Written Paper 1	30 Multiple choice questions on core connect	20%
Written Paper 2	Section A: One data- based question and several short-answer questions on standard and higher level content.	35%
Written Paper 3	Several short-answer questions in each of the options studied	25%
Internal Assessme	ent	20%
Individual investigation their choosing	ion into a research topic of	20%

# **GROUP 5 (MATHEMATICS)**

To cater for all abilities, Group 5 offers two Mathematics courses: Analysis and Approaches (SL & HL); Applications and Interpretation (SL & HL).

# **Mathematics: Analysis & Approaches** (SL & HL)

Contact: Dr J Sneddon

# **Entry Requirement**

Students who have successfully completed Level 1 Mathematics endorsed with Merit or higher with at least a Merit grade in Algebra External Standard (91027 or 91028). Students who have successfully completed Level 2 Mathematics would be suitable to study this at Higher Level.

#### Introduction

This course caters for students with a very strong background in Mathematics who are competent in a range of analytical and technical skills.

- Emphasis on algebraic methods
- Develop strong skills in mathematical thinking
- Real and abstract mathematical problem solving
- For students interested in mathematics, engineering, physical sciences and some economics

# Course Outline

Topics covered are:

- Quadratic functions and equations
- Probability
- Exponential and log functions
- Rational functions
- Patterns
- Sequences
- Limits and derivations
- Descriptive Statistics
- Integration
- Bi-variate analysis
- Trigonometry
- Vectors
- Circular functions
- Calculus with Trigonometry functions
- Probability distributions

Standard Level As	ssessment	
External Assessm	ent	80%
Written Paper 1 1.5 hours	No calculator allowed  Section A – Compulsory short-response questions based on the syllabus  Section B – Compulsory extended-response questions based on the whole syllabus	40%
Written Paper 2 1.5 hourrs	Graphic display calculator required  Section A – Compulsory short-response questions based on the whole syllabus  Section B – Compulsory extended-response questions based on the whole syllabus	40%
Internal Assessme	ent	20%

Higher Level Asso	essment	
External Assessm	nent	80%
Written Paper 1 2 hours	No calculator allowed Section A – Compulsory short-response questions based on the syllabus Section B – Compulsory extended-response questions based on the whole syllabus	30%
Written Paper 2 2 hours	Graphic display calculator required  Section A – Compulsory short-response questions based on the syllabus  Section B – Compulsory extended-response questions based on the whole syllabus	30%
Written Paper 3 1 hour	Extended response problem solving questions based on the syllabus	20%
Internal Assessm	ent	20%

# **Mathematics: Applications & Interpretation** (SL & HL)

Contact: Dr J Sneddon

## **Entry Requirement**

Students who have successfully completed Level 1 Mathematics with at least an Achieved grade in an Algebra Standard (91027, 91028 or 91029). Students who have a Merit Endorsement in Level 1 Mathematics with at least a Merit grade in an Algebra External Standard (91027 or 91028 would be suitable to study this at Higher Level.

# **ASSESSMENT**

Standard Level As	ssessment	
External Assessm	ent	80%
Written Paper 1 1.5 hours	Graphic display calculator required Compulsory short-response questions based on the whole syllabus	40%
Written Paper 2 1.5 hours	Graphic display calculator required Compulsory extended-response questions based on the whole syllabus	40%
Internal Assessme	ent	20%

#### Introduction

This course caters for students who enjoy problem solving and real world applications of Mathematics.

- Emphasis on modelling and statistics
- Develop strong skills in applying mathematics to the real-world
- Real mathematical problem solving using technology
- For students interested in social sciences, natural sciences, medicine, statistics, business, psychology and design.

Higher Level Asso	essment	
External Assessm	nent	80%
Written Paper 1 2 hours	Graphic display calculator required Compulsory short-response questions based on the whole syllabus	30%
Written Paper 2 2 hours	Graphic display calculator required Compulsory extended-response questions based on the whole syllabus	30%
Written Paper 3 1 hour	Compulsory extended- response problem-solving questions	20%
Internal Assessm	ent	20%

# **GROUP 6 (THE ARTS)**

Subject choices in Group 6 are Visual Art, Film Studies, Music and Theatre Studies

Film Studies Contact: Mr L Olive

# **Entry Requirement**

19 credits in NCEA Level 1 Media in Society or 18 credits in NCEA Level 1 English.

### Introduction

The Film Studies course at Standard and Higher Level aims to develop in students the skills necessary to achieve create and critical independence in their knowledge, experience and enjoyment of film.

The aims are to promote:

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

### Course Outline

IB Film Studies is both a powerful communication medium and an art form. The Film Studies course aims to develop students'

skills so they become adept in both interpreting and making film texts.

Through the study and analysis of film texts and exercises in film-making, the course explores film history, theory and socio-economic background. The course develops students' critical abilities, enabling them to appreciate the multiplicity of cultural and historical perspectives in film. To achieve an international understanding within the world of film, students are taught to consider film texts, theories and ideas from the point of view of different individuals, nations and cultures.

There is an expectation that students join the Film Society and 48 Hour Film Challenge in both years of the course.

Textual analysis: The study of films and film-making traditions for more than one country.

Creative process: Techniques and organisation of production. The development of creative, analytical and production skills within film-making.

# Additional Course Costs

8GB SD Card

Standard Level Ass	sessment	
External Assessme	ent	60%
Textual Analysis	Textual analysis (max 1,750 words) of a prescribed film text based on a chosen extract (max 5 mins), and list of sources.	30%
Comparative Study	Recorded multimedia comparative study (max 10 mins), and list of sources.	30%
Internal Assessme	nt	40%
Film Portfolio	Portfolio pages (max 9 pages: 3 pages per production role) and list of sources.  A film reel (max 9 mins: 3 mins per production role, including 1 completed film).	40%

Higher Level Asse	essment	
External Assessm	ent	40%
Textual Analysis	Textual analysis (max 1,750 words) of a prescribed film text based on a chosen extract (max 5 mins), and list of sources.	20%
Comparative Study	Recorded multimedia comparative study (max 10 mins), and list of sources.	20%
Internal Assessme	ent	60%
		00%
Film Portfolio	Portfolio pages (max 9 pages: 3 pages per production role) and list of sources.  A film reel (max 9 mins: 3 mins per production role, including 1 completed film).	25%

Music Contact: Ms M Li

### **Entry Requirement**

20 credits or more in NCEA Level 1 Music or at the discretion of the Head of Music if the student has sufficient practical skills and music literacy.

### Introduction

IB Music provides students with the opportunity to explore, experiment and present performances and composition/songwriting in various styles and genres. Students will also learn how to prepare, research and reflect their own and collaborative assignments for the portfolios submission.

# ASSESSMENT

Standard Level Assessment			
External Assessment	70%		
Explore Music in Context	30%		
Present Music	40%		
Internal Assessment	30%		
Experiment with Music	30%		

#### Course Outline

Through the roles of researcher, composer and performer, students will demonstrate understanding of diverse personal, local and global music contexts in four different areas of inquiry.

The following four areas of inquiry are taught in class with set works and strategies to implement these as part of their portfolio. There are no written or practical external examination at the end of the year.

- Sociocultural/Political
- Music for Listening
- Music for Film, Dance and the Dramatic Stage
- Music for the Digital Age

Standard Level students will complete:

- Explore Music and Context Music chosen from two areas of inquiry
- Experiment with Music Music chosen from two areas of inquiry
- Present Music chosen from all four areas of inquiry

Higher Level students will complete a collaborative task where they are able to complete a project with other IB or NCEA students with musical input.

Collaborative Contemporary Music Making – a 15 minute multimedia presentation

Higher Level Assessment	
External Assessment	50%
Explore Music in Context	20%
Present Music	30%
Internal Assessment	50%
Collaborative Contemporary Music Maker	30%
Experiment with Music	20%

Theatre Arts Contact: Mr D Sheehan

# **Entry Requirement**

There are no prerequisites for entry to the Theatre Arts course.

#### Introduction

IB Theatre Arts is an exciting course where students learn, through experience, all areas of theatre. Students will gain skills as creators, designers, directors, and performers.

Theatre is a dynamic, collaborative and live art form. It is a practical subject that encourages discovery through inquiry, experimentation, risk taking and the presentation of ideas to others. Through the study of theatre, students strengthen their awareness of their own personal and cultural perspectives, developing an appreciation of the diversity of theatre practices, their processes, and their modes of presentation. The creative collaboration experienced by students in the course will transfer to all areas of their Diploma.

#### Course Outline

At higher Level the core syllabus consists of four inter-related areas. Students will explore these areas from the perspective of dramaturg, director, performer, group ensemble, production team and spectator.

### Staging play texts

Students will learn how to transform a play from page to stage. Students will use this opportunity to formulate their own creative vision for a significant play and critically explore ways to stage this for an audience.

#### Exploring world theatre traditions

Students inquire into and physically explore world theatre traditions, performance conventions and performance material from those traditions in order to acquire a deeper understanding and appreciation of the traditions through the body and/or voice. This project will broaden students understanding of the world and help them become more globally minded.

## Collaboratively creating original theatre

Students will collaborate with their peers to create a fully realised production for an audience. Students will use their prior learning of staging plays and world theatre to create an original piece of theatre.

# Performing theatre theory (HL only)

Students will learn about an influential theatre theorist and create a solo piece of work based on their research. This allows students the opportunity to grow their performance skills whilst also supporting their understanding of professional stagecraft.

Standard Level Assessment			
65%			
35%			
30%			
35%			
35%			

Higher Level Assessment				
External Assessment	75%			
Solo Theatre Piece	35%			
Director's Notebook	20%			
Research Presentation	20%			
Internal Assessment	25%			
Collaborative Project	25%			

Visual Art Contact: Mr R Stratto

# **Entry Requirement**

Preference will be given to students who have completed Level 1 Visual Art. Please see Mr Stratton directly if you did not take Year 11 Visual Art to assess your suitability for IB Visual Art.

The aims of the course are:

- To investigate a range of materials, processes and techniques in a practical Art context. Students will also develop contextual and content knowledge of Visual Art across time, place and cultures and develop perceptual and analytical skills. This course encourages creative and divergent thinking and develops an ability to express ideas with confidence and competence
- Become an informed, reflective and critical practitioner and observer of visual culture and media. Students will make personal and culturally relevant artworks.
- Develop a range of art making skills and techniques

### Course Outline

# Year 1 topics

- Practical workshops taking into account core elements of Visual Art and Design
- Series of class briefs individually interpreted to produce visual outcomes in a range of genre's and approaches
- Comparative Study research and analysis of a range of art works with regard to the concepts and production of student's own work

# Year 2 Topics

- Individually proposed inquiry based projects that demonstrate understanding and practical skills, creative invention and knowledge of traditional and contemporary art making processes
- Individual and group exhibition, critiques of visited exhibitions, analysis of curatorial practice

# Additional Course Costs

- Art materials that can be purchased at a discounted rate through the Art department for students to complete work outside of lesson.
- SD Card for Photographs

# **ASSESSMENT**

Formative assessment/progress meetings through the school year will comprise of an evaluative and critical examination of student's progress with reference to the Diploma Assessment Schedule.

Standard & Higher Level Assessment				
External Assessment	60%			
Comparative Study	20%			
Process portfolio	40%			
Internal Assessment	40%			
Exhibition	40%			

# **Tertiary Pathways**

#### Please note:

- For entry into any university degree (Bachelors) course, University Entrance is required.
   (14 credits in each of a minimum of 3 NZQA approved subjects. Currently, the only non-UE approved subjects offered by Saint Kentigern College are Coaching and Leadership, Financial Literacy and Travel and Tourism).
   OR 24 points in the International Baccalaureate Diploma.
- 2. No subjects are compulsory at New Zealand tertiary establishments. NZ universities label them recommended/ highly recommended.
- 3. In addition to attaining University Entrance, universities also operate a points system/rank score calculated from the best 80 credits earned at Level 3. The score or points varies between establishments.

4. Where no location is given, it indicates that this degree is common across New Zealand's tertiary institutions (Universities, Institutes of Technology, Polytechnics, Wānanga and Private Training Establishments).

CAREER FIELD	QUALIFICATION TYPE	WHERE	MINIMUM ENTRY (IF DIFFERENT TO UE)	RECOMMENDED NCEA SUBJECTS
Agriculture/ Farming	Diploma		Minimum of 48 NCEA Level 2 credits in 4 subjects	Level 2 Biology, English, Maths, Chemistry or Physics
	Degree			Level 3 Biology, Maths & Chemistry
Apprenticeships e.g. builder, electrician, plumber	Certificate and Diploma		Specific to the course provider (ITO).	Level 1 English, Maths & Technology
Aviation [i] Air Force	Air Force Officer		90 Credits Level 3 English, Maths, Physics preferred	Level 3 Calculus, Physics & English
[i] / iii / Orce	Pilot/Navigator		Physics, 18 credits Level 2 Maths, English, Science preferred	Physics, Chemistry or Computer Studies & English
[ii] Flying Schools			Pre-selection process, 18 years of age	Level 2 Maths & Physics
[iii] Tertiary Education	Bachelor of Aviation	Massey	Pre-selection exam & high standard of English	Level 3 Physics, Calculus & English
Architecture	Degree	Auckland	Portfolio from a design subject	Calculus, Statistics, Physics English, Tech, Art, Design & DVC
		Unitec	Portfolio from a design subject	
		Victoria	No portfolio needed to enter 1st year but portfolio required for competitive entry in 2nd year	
Architectural Technology	Diploma	WELTEC	50 credits at NCEA Level 2 or above, with 12 credits in each of the following: Maths, English and Science subjects, or achieved a level 3 or 4 qualification in a related field	Maths, English & Science
Architectural Studies (Architectural Technologist or Interior Architect)	Degree	Otago Polytechnic	Portfolio from a design subject	Calculus, Statistics, Physics English, Tech, Art, Design & DVC

CAREER FIELD	QUALIFICATION TYPE	WHERE	MINIMUM ENTRY (IF DIFFERENT TO UE)	RECOMMENDED NCEA SUBJECTS
Business Management	Degree			Maths Statistics
Commerce	Diploma		48 NCEA Level 2 Credits or	English & Maths
	Degree		better	Maths, English, Accounting and Economics.
				Calculus if majoring in Economics or Finance
Communication	Degree			Drama, English, Art & History
Computer Science	Degree			Computer Science, Maths & Physics
Quantity Surveying	Diploma	ARA, Massey, SIT & WELTEC	50 credits at NCEA Level 2 or above with at least 12 credits in	English, Maths & Science
	Degree	Massey & UNITEC	each of English, Maths and Science, or achieved a level 3	Accounting, Computer Science Economics, English, Maths & Product design
Construction	Degree	ARA, Massey, Victoria & UNITEC		Maths (required to at least NCEA Level 2), DVC, Product Design & Science
Dentistry	Degree	Otago	Must start with 'Health Sciences First Year' The competitive entry into 2nd year	
Design	Degree			Visual Art – Design or DVC is essential. Useful Art History, Classics English, History, Maths, Physics, & Computer Studies
Early Childhood	Certificate		NCEA Level 2	Art History, Classical Studies, English, Geography, History, Maths, Media Studies & other
Education	Diploma			
	Degree			languages
Engineering	Diploma	MIT, NZMIT, WELTEC & UCOL	48 credits at NCEA Level 2 in four subjects - including at least 12 credits in maths (preferably credits in algebra, calculus or trigonometry)	
	Degree	AUT, Auckland, Canterbury, Waikato		Level 3 Calculus & Physics essential. Chemistry highly recommended. Chemistry required for Canterbury.
Environmental Sciences	Degree			Chemistry, Biology, Maths Statistics, Geography
Fine Arts	Diploma		Portfolio required Level 2 in English & Art	Art, Art History & English
	Degree		Portfolios required at all institutions	Art, Art History & English
			Canterbury: Good passes in 2 Art Level 3 subjects & portfolio, or 2 portfolios.	
			Auckland: Portfolio and written application required. Massey: Competitive entry, portfolio.	
Food Science/ Human Nutrition	Degree	AUT, Auckland, Massey & Otago		Chemistry essential. Biology, Maths & Physics recommended
Food Technology	Degree	AUT, Massey		16 credits in each of Chemistry, Maths & Physics
Forestry	Degree	Massey		Biology, Chemistry & Statistics

CAREER FIELD	QUALIFICATION TYPE	WHERE	MINIMUM ENTRY (IF DIFFERENT TO UE)	RECOMMENDED NCEA SUBJECTS
Health Science (NOT entry for Medicine/Dentistry)	Degree	AUT Includes Case management, Counselling, Health management & Public and environmental health		Biology, Chemistry & Maths. A literacy rich subject is also recommended.
		Otago		Biology, Chemistry & Maths. A literacy rich subject is also recommended.
Horticulture	Diploma	Lincoln, Massey	Minimum 40 credits NCEA Level 2 plus UE literacy and numeracy	Biology, Chemistry & Maths
	Degree			Biology, Chemistry & Maths
Journalism	Degree			Literacy rich subjects
Languages	Degree			Recommend having studied the specific language at NCEA Level 3 or for it to be a first language
Law	Degree		Studied as a conjoint degree.  Competitive entry into 2nd year for most programmes.  Competitive entry into 1st year at Waikato but continue into the rest of the programme	Literacy rich subjects
Medicine Degree	Auckland	Either 1st year Biomedical Science or 1st year Health Science followed by competitive entry into 2nd year	2 Sciences and a maths recommended	
		Otago	Health Science First year programme followed by competitive entry into 2nd year	
Medical Laboratory Science	Degree		For Otago Health Science First year programme followed by competitive entry into 2nd year	2 Sciences and a maths recommended
Midwifery	Degree	ARA, AUT, Otago Polytechnic, Victoria & WinTec		Biology & Chemistry
Music	Degree		NZSM – some papers require music theory and some require audition.	Music, music production
Nursing	Degree			Must have 2 sciences
Optometry	Degree	Auckland only	Must complete 1st year Biomedical Science or Otago's Health Science First year programme	2 Sciences and a maths recommended
Paramedicine	Degree	AUT Whitireia	Must have a Driver's Licence and be over 18 years old at the start of the programme	Biology, Chemistry and Maths recommended
Pharmacy	Degree		Auckland: competitive. Direct entry and interview. Level 3 Biology & Chemistry essential Otago Health Science for first year.	
Physical Education	Degree	Otago		English, Biology & P.E. at Level 2 and Level 3 recommended.

CAREER FIELD	QUALIFICATION TYPE	WHERE	MINIMUM ENTRY (IF DIFFERENT TO UE)	RECOMMENDED NCEA SUBJECTS
Physiotherapy	Degree	AUT, Auckland & Otago		Biology, Chemistry and Maths recommended
Psychology	Degree		Offered as a Bachelor of Science and as a Bachelor of Arts.	Literacy rich subjects
Sport and Recreation	Degree			Health, Physical education, Biology
Sciences	Degree			2 Science and a maths (depends on specialism – typically recommend Chemistry with either Biology or Physics)
Speech and Language Therapy	Degree	Auckland, Canterbury, Massey & WinTec		Biology, Chemistry, English & Languages
Social Work	Degree		Competitive entry to second year	Literacy rich subjects
Surveying	Diploma		Minimum 35 Level 2 credits in best 3 subjects including Maths, 12 credits in Algebra & trigonometry	
	Degree			English, Calculus, Statistics, Computer Studies & Geography useful
Teaching	Degree		Primary: some required subjects	English & Maths. Will require a subject specialism
			Secondary: 4 year degree or Post Graduate diploma	
Technology	Degree			Physics & Calculus; Chemistry if major in degree
Veterinary Science	Degree	Massey only	A pre-selection phase (1 semester) open to anyone who meets the University Entrance criteria. Competitive entry into semester 2.	Minimum of 14 credits in each of: Biology Chemistry Recommended that Physics and Maths are taken to a minimum of Level 2.