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SCOTS COLLEGE



# SECONDARY SCHOOL CURRICULUM HANDBOOK 2011

YEARS 11, 12 & 13



LEARNING. FOR LIFE.

# CURRICULUM HANDBOOK 2011

The Curriculum Handbook is a critical part of your son's educational pathway – it provides information on subjects, courses and careers.

The Handbook also provides an up-to-date explanation of NCEA, the 'new' qualifications structure which started in 2002.

Course selection is crucial! It is important that students and their families spend time discussing the appropriate courses for their future aspirations. As a general rule of thumb, courses should be chosen which leave doors open as young people are likely to change their goals as they move through the College.

Please read the careers section in the Handbook carefully. The requirements for certain careers may include prescribed subjects or standards. If you have any doubt in this regard, please consult with the Careers Adviser, Mr de Graaff.

There are many avenues of sound advice in the College ranging from subject teachers, to House Deans and the Director of Studies. Mr de Graaff, the Careers Advisor, has the most up to date information available especially from Universities and their entry criteria. A highlight of the year in this regard was the recently held careers evening where industry experts were brought in to advise the students. I would urge students and families to attend the year level evenings hosted by the College.

G K Yule

Headmaster

June 2010

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# INTRODUCTION

This booklet is designed to give parents and students an overview of the courses offered in the senior Secondary School at Scots College so that they are in a position to make wise course selections in the students' final three years at Secondary School.

It gives general details about courses and careers, and then outlines details of each individual subject.

The actual combinations of subjects available in years 11-13 in any one year depend on the constraints imposed by the timetable and the numbers of students opting to do particular subjects. Subjects will only be available if there is a sufficient number of students wishing to take them.

Late in term 2, parents and students are asked to make choices, and at this stage we do our best to satisfy all these choices, though we cannot guarantee that any particular combination of subjects will be available. Once the structure of the timetable is established, and a decision made about which subjects are timetabled at the same time as other subjects, then this structure cannot be changed. This means that if at a later date the student wishes to change his course he can only do so within that established structure.

If you have any questions concerning your own particular situation as far as course selection is concerned, please don't hesitate to contact the Director of Studies, Matthew Bertram, on 803 0597 or your son's House Dean.

# NATIONAL CERTIFICATE IN EDUCATIONAL ACHIEVEMENT (NCEA)

NCEA has three levels, Level 1 (replacing School Certificate), Level 2 (replacing Sixth form Certificate), Level 3 (replacing University Bursary) and there is also NZ Scholarship for the most able level 3 students.

At least 50% of the year's work in most subjects will be externally assessed, in general by means of a 3 hour examination, while up to 50% (depending on the subject) will be internally assessed. This external assessment will take place in all three of years 11, 12 and 13. Scholarship is assessed purely by means of a three hour examination (or a folio of work in the case of Graphics and Visual Art).

## WHY THE CHANGE?

Many more students are staying on at school and in education beyond school. The old examination system didn't cater for all those students and the new system is designed to bring under one umbrella the normal school subjects (such as those taught at Scots College) as well as a much wider diversity of areas of learning (such as food technology or car maintenance).

It is also felt that a global mark (for example "Maths 63%") says very little about **what** the student actually knows. Possibly he could be very good at algebra and very weak at geometry, or vice versa, and yet still achieve the same mark of 63%.

## HOW DOES IT WORK IN PRACTICE?

The curriculum content of each subject at each level is divided up into about five to eight 'topics' and each of these topics is either internally or externally assessed.

For each topic there will be an **Achievement Standard** (AS) which specifies exactly what the students have to do in order to 'pass', earning credits towards the NCEA. For each standard there are three levels of achievement: **achieved** (for the average student), **achieved with merit** (for the better students) and **achieved with excellence** (for the top students).

Some of the subjects at Scots College will be assessed by **Unit Standards** (US) which have been around for many years and which are similar to achievement standards except that there is no division into achieved, merit, excellence, and they are always internally assessed. Credits achieved via units standards have the same status as those from achievement standards as far as NCEA is concerned.

To achieve the NCEA students will have to accumulate a certain number of credits (see below). So each student's official annual results (issued in May of the following year) will show:

- credits gained from the standards (both external and internal)
- grades (achieved, merit or excellence) for each standard
- examination results for the externally assessed standards
- the level of NCEA completed including any applicable endorsements.

After students have left school, they will be able to complete or upgrade their NCEA level. NCEA credits can be gained in most courses at polytechnics and colleges of education, and in accredited private and government training establishments and on-job training programmes.

NCEA results are recognised by tertiary institutions (both NZ and overseas) and employers. For some purposes, internal results may be more relevant; for others, examination results may be more relevant. But for most purposes a combination of all results will give a clear picture of a student's achievements.

## LEARNING V ASSESSMENT

It should be noted that all the above refer to the way in which the courses are **assessed**. What is being taught remains largely unchanged; that is, the subject being taught will continue to follow the New Zealand Curriculum which has now been in place for several years.

## NCEA LEVEL 1

To achieve NCEA Level 1, a student needs to gain 80 credits from all his subjects, with each subject being worth 20 to 24 credits. So a student doing six subjects needs to get 80 out of the likely maximum of 144 credits on offer. A student must gain **ten** credits each from English and maths, to indicate a degree of literacy and numeracy.

To qualify for a full NCEA level 2 course, a student needs to have achieved NCEA level 1. For individual subjects, a student needs to gain 16 credits at level 1 (plus any stated prerequisites) to **guarantee** entry into the same subject at level 2, but as always, individual circumstances will be taken into account.

## NCEA LEVELS 2,3

To achieve level 2 or 3, 80 credits are needed - 60 credits at that level and a further 20 credits which could come from a lower level i.e. level 1.

### ENDORSEMENT FOR MERIT, EXCELLENCE

The NCEA level 1, 2 and 3 qualifications is endorsed 'with excellence' or 'with merit' if at least 50 of the 80 credits are gained with excellence/merit respectively. Individual subject endorsements are also available where a student gains 14 or more credits in a subject with excellence/merit respectively provided at least 3 credits are external and 3 credits are internal (PE and Visual Art are exempt from this requirement).

### FLEXIBILITY

The new assessment structure is more flexible. An example would be if a student does half a year of a course and then finds it too hard, he could change course and pick up some credits in the second half year's modules from a different subject while at the same time retaining any internal credits gained in the first half year.

### EXAMINATIONS NCEA LEVELS 1, 2, 3

A student gains credits in each subject, some internally assessed, some externally assessed - see previous two pages. The externally assessed credits are examined in most subjects by means of three hour examinations in November (but not Visual Art, Graphics, Physical Education, Technology).

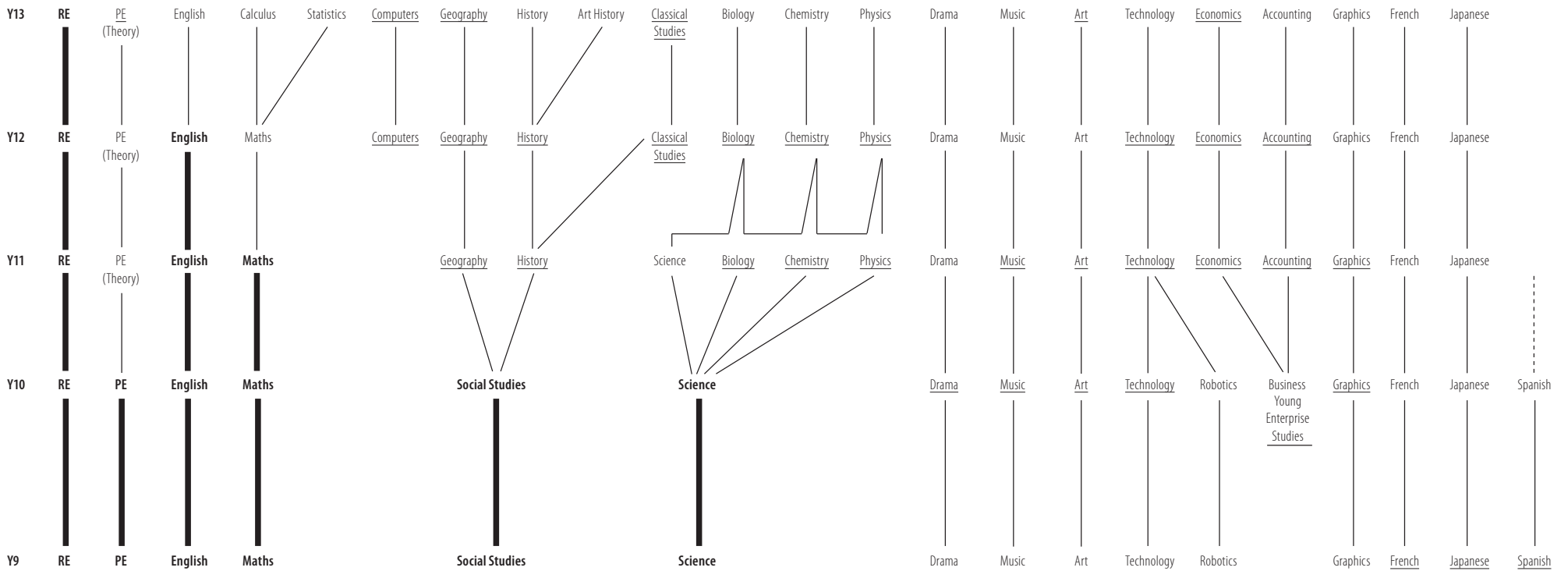
### UNIVERSITY ENTRANCE (NCEA LEVEL 3, ENGLISH LEVEL 2, MATHS LEVEL 1)

Another important qualification is University Entrance, which entitles a student to a place at university. To achieve this, 14 credits are needed at level 3 in each of three subjects. Two of the subjects have to be from a particular selection of subjects but the third 'subject' can be a combination of two other subjects so that for example a student could get 6 economics credits and 8 biology credits Also needed are 8 English credits at level 2 (4 reading, 4 writing) as well 14 maths credits at level 1

## NZ SCHOLARSHIP (YEAR 13)

In addition the most able students are encouraged to enter Scholarship in up to three subjects; each subject (except Visual Arts and Graphics) has just one examination. Students need to be aware that the Scholarship exams occur concurrently with the level 3 exams in November and this will mean several exams in a short space of time. A decision about whether or not to enter Scholarship needs to be made early in term 3.

# SECONDARY SCHOOL COURSE STRUCTURES 2011 (NCEA)



**Subject Underlined:** Subject may be commenced at this level  
**Thick Lines:** Continuation of this subject is compulsory  
**Thin Lines:** Continuation of this subject is optional

**RE:** Religious Education and Life Skills  
**PE:** Physical Education

# INTERNATIONAL BACCALAUREATE DIPLOMA

*This is important for students in Year 11 and below in 2010*

The International Baccalaureate (IB) Diploma is an internationally recognised two-year qualification based on subjects studied in years 12 and 13. It aims to give students a broad holistic qualification. It is assessed in six main subject areas as well as creativity, action and service (CAS – this looks at community service, sporting and cultural activities), theory of knowledge (TOK – this looks at the philosophy of how knowledge is used) and an extended essay (3000 words) in a subject of the student's choice. It is quite a difficult course, and students struggling with their subjects are advised not to do it.

In 2010 the IB Diploma was introduced by the College at year 12, which means that the current year 9 to 11 students will have a choice of doing either the IB or NCEA (it is not possible to do both).

The Diploma programme prepares students for university and encourages them to:

- ask challenging questions
- learn how to learn
- develop a strong sense of their own identity and culture
- develop the ability to communicate with and understand people from other countries and cultures.

If you are considering the IB Diploma programme the following are important:

- average or above average ability
- a sound record of achievement to date
- self motivated and a desire to be challenged
- independent learning skills
- good organisational and time management skills
- a desire to keep your options broad
- an interest in an international perspective.

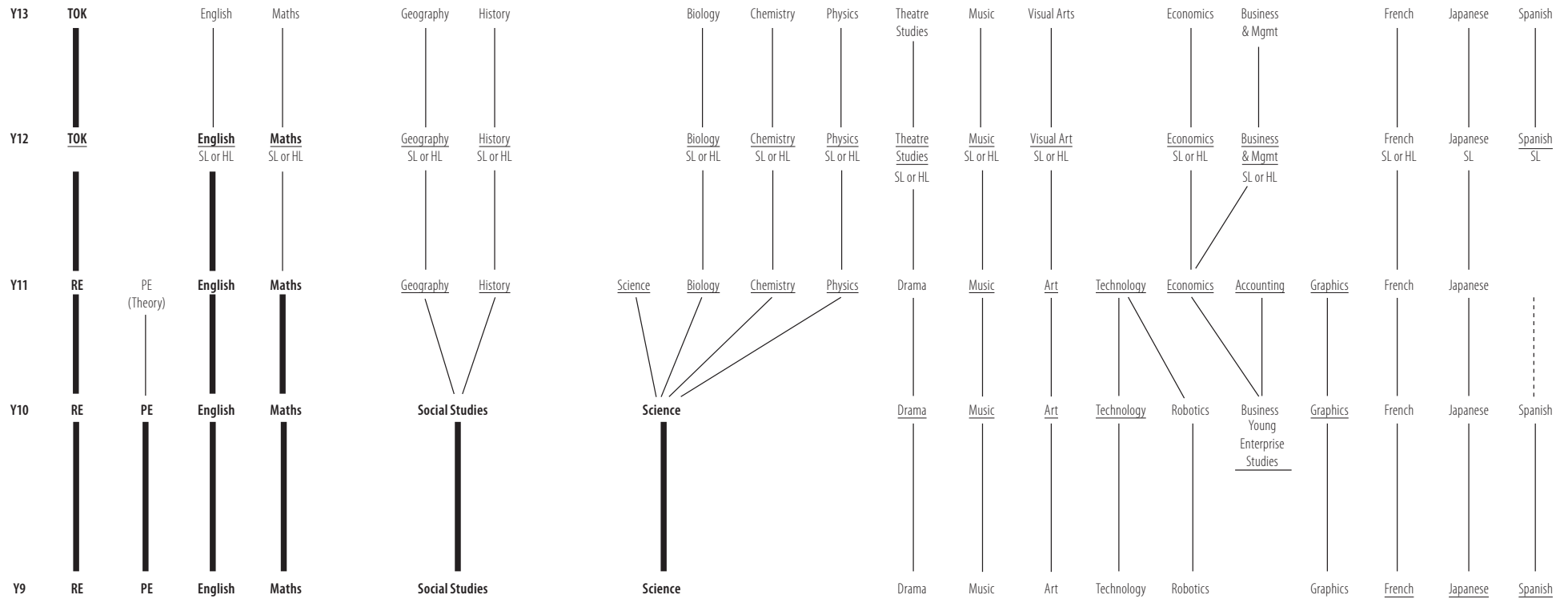
In the IB Diploma there are six groups of subjects to choose from:

English | Foreign language | Humanities | Sciences | Maths | Arts

If a student is interested in doing the IB Diploma, then it will have some impact on his choice of subjects for 2011:

- English and maths are compulsory throughout the IB, and so students will have to study them in year 11 (as happens with NCEA)
- There has to be at least one science, and it should be an individual science (biology, chemistry or physics) rather than the general science course.
- There has to be at least one humanities subject (geography, history or economics)
- In year 12 and 13, the IB student will have to study a foreign language, so either he continues with French and Japanese in year 11 with the idea of continuing through to years 12 and 13, or in year 12 he can start learning Spanish which means he doesn't have to do French or Japanese in year 11.
- In IB there is a block for the creative arts (theatre studies, visual art and music) but this is not compulsory and a student could, if he wanted, do a second science or a second humanity.
- A third science could replace the humanities option.

# SECONDARY SCHOOL COURSE STRUCTURES 2011 (IB DIPLOMA)



**Subject Underlined:** Subject may be commenced at this level  
**Thick Lines:** Continuation of this subject is compulsory  
**Thin Lines:** Continuation of this subject is optional  
**Dashes:** Continuation of this subject as a two-year course

**RE:** Religious Education and Life Skills  
**PE:** Physical Education  
**TOK:** Theory of Knowledge  
**SL:** Standard Level  
**HL:** Higher Level

# GENERAL COURSE INFORMATION – NCEA

## YEAR 11 COURSES:

Students take six NCEA Level 1 subjects. In addition all students will have 2 periods per fortnight of Religious Education and 2 periods per fortnight of Physical Fitness and 2 periods per fortnight of Leadership.

English and Mathematics are compulsory and the remaining four subjects must be chosen from the following list:

Biology	French	Accounting	Drama	Graphics
Chemistry	Japanese	Economics	Music	Workshop Technology
Physics		Geography	Visual Art	Physical Education
Science		History		

### Parents and students should consider the following:

- At Year 11 we offer a general science course (**Science**) and the three specialist sciences (**Biology, Chemistry and Physics**). The College policy is that all students at year 11 are strongly recommended study at least one science subject.  
Those students who intend to study Physics, Chemistry or Biology in Year 12 are advised to study those subjects in Year 11.
- The course is expected to lead somewhere in terms of career choices, and so should not be too fragmented; for advice on this please see the Director of Studies or the Careers Advisor.
- The structure of the timetable might not permit certain combinations of subjects to be offered, though it would only be fragmented courses that would run into difficulty.
- Students are likely to do better in subjects in which they are interested and also subjects in which in the past they have had success.
- The Physical Education course being offered is a full course including theory and is not the same as the compulsory physical fitness (see the summary of this course on page 28).
- Some subjects (such as sciences, languages, music, visual art) depend on a cumulative knowledge and are difficult for the average student to pick up at higher levels.

## YEAR 12 COURSES:

Students take six subjects at NCEA Level 2 as well as 2 periods per fortnight of Religious Education and 2 periods per fortnight of Physical Fitness and 2 periods per fortnight of Leadership. A few students find it is more appropriate to do five subjects, in which case they also have some supervised study periods.

English is compulsory and it is expected that most students will study Mathematics. The remaining subjects must be chosen from the following list:

Biology	Accounting	Drama	Physical Education
Chemistry	Classical Studies	Music	Workshop Technology
Physics	Economics	Visual Art	
	Geography	French	Computer Studies
	History	Japanese	Graphics

### Parents and students should consider the following:

- Courses selected should be less general than in Year 11 and should be more career oriented.
- Particular attention should be given to selecting courses which are prerequisites for tertiary courses – the Careers Adviser can help here.
- Care should be taken to ensure that a Year 13 course for the following year is compatible with the current course you are choosing.
- Notes b) and d) of Year 11 courses also apply.
- Many of the courses can possibly be picked up without having done them in Year 11 – Drama, Economics, Geography, History, Classical Studies, Computer Studies, Physical Education and Workshop Technology.
- The Music course is largely a practical course (see the summary on page 26).

## YEAR 13 COURSES:

Students are expected to take five subjects at NCEA level 3. No subjects are compulsory and the five subjects must be chosen from the list below:

Biology	Accounting	Drama	English	Art History	PE
Chemistry	Economics	Music	French	Geography	Technology
Physics	Computing	Photography	Japanese	Classical St.	Graphics
Calculus		Painting		History	
Statistics		Design			

### Parents and students should consider the following:

- Particular attention should be given to selecting courses which are prerequisites for tertiary courses – the Careers Adviser can help here.
- Notes b) and d) of Year 11 courses also apply.
- Most subjects follow on from Year 12 subjects and a student is expected to have studied them in Year 12 already. There are exceptions particularly for more able students – economics, classical studies and physical education.
- Students may study **both** Mathematics courses (see the note on page 25). Students may study three sciences.
- Visual Art can be taken either as a single subject or it can be counted as a double subject (see the course summary on page 30). However for scholarship, only one Visual Art subject can be counted for a student
- A subject having very small numbers wishing to do it will either not be offered, or it may have fewer teacher-contact periods per week than usual or it may be combined with a small level 2 class.
- Students need to be aware of University Entrance requirements in terms of the necessary English and maths credits (see page 4).

## MIXED LEVEL COURSES:

There is nothing to prevent a student studying at two or three different levels. For example a student who failed to achieve many credits in Mathematics in Year 11 might repeat Mathematics at NCEA Level 1 but do his other four subjects at Year 12 level. Or a student doing five NCEA level 2 subjects might choose a Year 11 subject as a sixth subject. There are possible timetable constraints on the facility for doing this. If an individual achievement standard has been missed at Level 1, for example, it could possibly be done from within the Level 2 class in that subject.

# COURSE PLANNING FOR CAREERS

When choosing a course it is best to keep your subjects as broad as possible for as long as possible. Entry into many careers is not as dependent on course choice as it is on achievement levels. Below are a list of careers that students at Scots often enquire about and the subjects required. Some are compulsory and others are just recommended.

CAREER AREAS	LEVEL	LEVEL 2	LEVEL 3
<b>Apprenticeships</b> Many including chefs, electricians and carpenters	English Maths Science		
<b>Armed Forces</b> – Trades  – Officer Training – Degree programmes	English Maths Science		80 -100 credits at level three
<b>Architecture</b>	Maths Art and/or Graphics		<u>Auckland University</u> Combination of arts/sciences/maths. <b>Portfolio of art work required.</b> High Level 3 <u>Victoria University</u> Selects from intermediate year. <b>Must have 2 subjects out of Calculus, statistics or physics.</b> No portfolio required <u>Unitec</u> Portfolio required
<b>Commerce Degree</b> Students are able to commence accounting and economics at university but it is recommended they begin study at school.			Statistics Calculus (if majoring in economics) Accounting Economics <u>English rich subject is recommended</u>
<b>Commerce/Business certificates and diplomas</b>	Maths		
<b>Computing/IT degree</b> (computer studies useful but not required)		Maths Comp studies	Calculus and physics recommended
<b>Dentistry</b> University of Otago		Maths Biology Chemistry Physics	<b>Biology, Chemistry, Statistics</b> or <u>Calculus</u> <b>English</b> or an <u>English rich subject</u>

CAREER AREAS	LEVEL	LEVEL 2	LEVEL 3
<b>Design, Fine Arts and Visual Arts</b> Elam (Auckland University)  Ilam (Canterbury University)			<b>2 Practical Art subjects</b> History of Art recommended. <b>Portfolio required</b> <b>Portfolio required. Min 2 art subjects</b> <u>English or History of Art of History recommended</u>
<b>Engineering Degree</b>			<u>Canterbury University</u> <b>Calculus, Chemistry, Physics</b> <u>Auckland University</u> <b>Calculus, Physics</b> <u>Victoria University</u> Open entry although Calculus strongly recommended <u>Massey University</u> <b>Calculus, Physics &amp; some courses require Chemistry</b>
<b>Food Science/Technology</b>		Mathematics Chemistry Biology Physics	<b>Physics</b> <b>Calculus</b> <b>Biology</b> <b>Chemistry</b>
<b>Forestry</b>			English, Chemistry, Biology, Economics, Geography, Statistics are recommended
<b>Education/Teaching</b>		Maths, a science	English, "arts" subjects and/or maths/science
<b>Law</b>		English History Classics	English, History, Classics or other English rich subjects are recommended.
<b>Medicine</b> (no intake direct from school) All applicants must complete the first year B. Health Science or Biomedical Science at either Otago or Auckland University		English Chemistry Biology Maths Physics	<b>English (or English rich eg classics, history) is compulsory at <u>Auckland University</u></b> <b>Chemistry, Physics, Biology, Statistics</b> or <u>Calculus</u> <u>Otago University</u> <u>Strongly recommend above subjects</u>

CAREER AREAS	LEVEL	LEVEL 2	LEVEL 3
<b>Music</b> NZ School of Music, Auckland University Entry by audition  <u>NZ School of Music, Victoria University</u>	Music Recommended: English, history	Music Recommended: English, history, classical studies	Music Recommended: English, history, classical studies <b>Jazz, Performance &amp; Popular Music an audition is required</b> <u>Music</u> <b>Jazz, Performance &amp; Classical Music an audition is required</b>
<b>Optometry</b>		English Chemistry Biology Maths Physics	English Chemistry Biology Statistics Physics
<b>Performing Arts</b> Auckland University Entry by audition	English Drama	English Drama	English Drama
<b>Pharmacy/physiotherapy</b> – see Medicine			
<b>Physical education degree</b>		Biology English	English, Biology, Phys Ed highly highly recommended Chemistry useful
<b>Pilot</b>		Maths Physics Chemistry	Statistics, Physics Calculus, English
<b>Police</b>	Any	English	Any
<b>Radiotherapy</b>		English Physics Maths	<u>English Rich subject</u> <u>Physics or Biology</u> <u>Statistics or Calculus</u>
<b>Resource and environmental planning</b>		English Maths Biology Geography	English Statistics Biology Geography

CAREER AREAS	LEVEL	LEVEL 2	LEVEL 3
<b>Surveying</b>		Maths A science	<u>Calculus, English</u> <u>are strongly recommended with</u> <u>Statistics, Physics &amp; Geography</u> <u>recommended</u>
<b>Sports Degree</b>	English Maths PE Science	English Maths PE A science	English PE A science
<b>Technology Degree</b> including majors in: biotechnology, chemical, food, industrial bioscience, industrial maths, info tech, optoelectronics, product development	English Maths Science	English Maths Biology Chemistry Physics	English Calculus Statistics Biology (depending on major) Chemistry Physics
<b>Tourism</b> There are no formal prerequisite. However the following subjects are recommended	English Maths Science Accounting Economics Geography Languages	English Maths Science Accounting Economics Geography Languages	English Maths Science Accounting Economics Geography Languages
<b>Veterinary Science</b>			Chemistry Biology Physics Statistics preferred

# SOME USEFUL WEBSITES

Career Resource Centre	<a href="http://www.careers.org/index.html">http://www.careers.org/index.html</a> .
CV writing	<a href="http://www.jobsmart.org/tools/resume/index.htm">http://www.jobsmart.org/tools/resume/index.htm</a>
Job Hunting	<a href="http://www.nzjobs.co.nz">http://www.nzjobs.co.nz</a> (recruitment ads) <a href="http://www.netcheck.co.nz">http://www.netcheck.co.nz</a> (job search) <a href="http://www.netclassifieds.co.nz">http://www.netclassifieds.co.nz</a>
Job Options	<a href="http://www.joboptions.com">http://www.joboptions.com</a>
Kiwi Careers	<a href="http://www.kiwicareers.govt.nz">http://www.kiwicareers.govt.nz</a>
Monster Site	<a href="http://www.monster.com">http://www.monster.com</a>
Parachute Guide	<a href="http://www.jobhuntersbible.com/">http://www.jobhuntersbible.com/</a>
Qualifications	<a href="http://www.kiwiquals.govt.nz">http://www.kiwiquals.govt.nz</a>
Riley Guide	<a href="http://www.dbm.com/jobguide/">http://www.dbm.com/jobguide/</a> <a href="http://www.rileyguide.com">http://www.rileyguide.com</a>
Yahoo!	<a href="http://www.yahoo.com.Business/Employment">http://www.yahoo.com.Business/Employment</a>
Career services	<a href="http://www.careers.govt.nz">www.careers.govt.nz</a>
Australian Universities	<a href="http://www.curriculum.ed.au">www.curriculum.ed.au</a>
UK study	<a href="http://www.educationuk.org">www.educationuk.org</a> or <a href="http://www.britishcouncil.org.nz">www.britishcouncil.org.nz</a>
US study	<a href="http://www.fulbright.org.nz">www.fulbright.org.nz</a> and <a href="http://www.collegeboard.com">www.collegeboard.com</a>
US University database	<a href="http://www.utexas.edu/world/univ/alpha/">www.utexas.edu/world/univ/alpha/</a>

Please feel free to visit the careers room at anytime or make an appointment to see DEG after school or at lunchtime.

# COURSE STRUCTURES (NCEA)

# ACCOUNTING

## **What special skills do I acquire?**

Practical accounting skills, analytical and organisational skills.

## YEAR 11 NCEA LEVEL 1

### **What is the subject about?**

Year 11 accounting aims to promote an understanding of accounting as a financial language for individuals, community organisations and businesses. Students should be able to apply financial knowledge and skills to practical situations.

### **How will I learn?**

By preparing and analysing business financial statements. Students will also process financial information for community organisations and households.

### **What subjects should I have already done?**

The year 10 Enterprise Studies course is an advantage but not necessary.

### **Where does this subject lead?**

To further study in Y12/13 accounting. It provides a base for competency in personal accounting, preparation and analysis of final accounts. It is a valuable life skill.

### **How is the course assessed?**

10 credits are assessed internally and 12 externally.

## YEAR 12 NCEA LEVEL 2

### **What is this subject about?**

Year 12 Accounting aims to provide knowledge and understanding of accounting as a financial language for trading and service businesses. You will apply financial knowledge and skills to practical situations and research an individual business..

### **How will I learn?**

By extending skills taught in Year 11, applying them specifically to the processing of data and the analysis and interpretation of information. The course is also computer based giving the opportunity for hands on experience of practical accounting work.

### **What subjects should I have already done?**

NCEA level 1 Accounting with 16 credits.

### **Where does this subject lead?**

Year 12 Accounting provides a basis for personal financial decision making and is a useful vocational qualification. It leads to Year 13 Accounting.

### **How is the course assessed?**

12 credits are assessed internally and 12 externally.

## YEAR 13 NCEA LEVEL 3

### **What is this subject about?**

You will learn how to prepare financial statements for partnerships and companies. You will analyse a company's annual report and make an investment decision. Accounting for management and manufacturing businesses is also covered.

### **How will I learn?**

You will be looking at, using, analysing and interpreting various accounting systems and methods of processing accounting data in the business world.

### **What subjects should I have already done?**

You should have studied Accounting at NCEA level 2 with 16 credits

### **Where does this subject lead?**

Year 13 Accounting provides a stimulus and foundation for the study of accounting and business courses at universities. The course also provides a basis to help personal financial decision-making and is a recognised vocational qualification.

### **How is the course assessed?**

5 credits are assessed internally and 19 externally.

# ART HISTORY

## YEAR 13 NCEA LEVEL 3

### **What is the subject about?**

We focus on the foundation of Art History – the Italian Renaissance.

We study the artists, artworks, styles of art and societal context of 14th, 15th and 16th century Italy. This provides students with a thorough understanding of the way art has developed and influenced subsequent art movements and this is explored by comparative study with modern art works.

**How will I learn?**

You will examine, analyse and compare images of artworks. You will gather and process information from art historical writing. You will do your own research from the internet, books and DVDs. You will learn to apply your knowledge and understanding.

**What subjects should I have already done?**

Open entry. Good English language skills are needed to cope with the reading/writing requirements. Art History does not require any technical art skills – you won't have to paint, draw or sculpt. It does however, provide excellent support for Visual Art students and it fits well with Classics, History, Drama and Music.

**Where does the subject lead?**

Graduates with Art History degrees have well developed analytical and communication skills, good for law or public policy. Others work in areas such as print/visual media and creative industries. Art gallery or museum work includes education, exhibition curation and conservation of artworks.

**How is the course assessed?**

13 external credits (90490, 90491, 90495) and 11 internal credits (90492, 90493, 90494)

# BIOLOGY

**What special skills do I acquire?**

Research, experiment design, data evaluation, report writing, essay-writing, laboratory skills and field work. More able students are encouraged to enter ICAS, Brain Bee, Otago Science Quiz and the Biology Olympiad competitions.

## YEAR 11 NCEA LEVEL 1

**Note:** Check the guidelines on p7 regarding the choice of Year 11 science subjects.

**What is the subject about?**

Biology is the study of living things and their interaction with the environment, including NZ ecosystem, genetics, microorganisms, flowering plants, animals and practical investigation.

**How will I learn?**

Biology is an investigative subject so there are notes, field work, individual research, assignments, examples and tests, all designed to develop an understanding of the living world. There is a field trip and plenty of practical work.

**Where does this subject lead?**

The course leads to biology NCEA levels 2,3, IB and to many subjects at tertiary level in the area of biological sciences, health sciences, technology, sport and environmental studies.

**How is this assessed?**

By achievement standards, one internal (4 credits) and four externals (16 credits).

## YEAR 12 NCEA LEVEL 2

**What is this subject about?**

This course is about the diversity of living things, ecological principles, cell physiology, biochemistry, genetics and evolution, structure and function of animals and resource management.

**How will I learn?**

By observing, recording, analysing, and interpreting through experiments, projects, field work, and the use of a variety of equipment. You will need to read, research and communicate findings through projects, tests, assignments, seminars. There may be visiting speakers and visits for course-related topics.

**What subjects should I have already done?**

NCEA level 1 Science or Biology with at least an achieved grade in AS 1.3 and 1.6

**Where does the subject lead?**

NCEA level 3 Biology. It is also a pre-requisite for many courses at the tertiary level, including Polytechnics, Teachers' Colleges and Universities.

**How is the course assessed?**

By achievement standards, both internal (12 credits – 90457, 90769, 90460, US 8928) and external (12 credits – 90459, 90462, 90464).

## YEAR 13 NCEA LEVEL 3

**What is this subject about?**

Research on a contemporary issue (eg ethical considerations in genetic engineering, stem cells, transgenesis) and an individual practical investigation requiring statistical analysis. Studies of animal behaviour, plant responses, biotechnology and a major study of genetics and evolution including the biological and cultural evolution of humans.

### **How will I learn?**

By practical investigations, essay, lecture notes, assignments, portfolio on a research issue, seminars, speakers on ethics and biotechnology; a four day field trip to Kaikoura. Scholarship students participate in Lenscience seminars from Auckland University.

### **What subjects should I have already done?**

NCEA level 2 biology with a minimum 16 credits – AS 2.3 (genetic variation and evolution) is essential.

### **Where does this subject lead?**

Development of research, analytical, statistical and essay-writing skills for students intending to study health sciences, environmental engineering and forestry, biochemistry, sports science, biotechnology, commerce, or conjoint degrees in genetics/commerce or biology/ law, veterinary and biomedical.

### **How is the course assessed?**

By achievement standards, both internal (10 credits) and external (14 credits).

## CHEMISTRY

### **What special skills do I acquire?**

Logical and concise thinking: clarifying ideas and testing explanations through experiments; relating abstract concepts to practical situations and learning the specialist language of chemistry.

### YEAR 11 NCEA LEVEL 1

**Note:** Check the general guidelines (page 8) re choice of Year 11 science subjects.

### **What is this subject about?**

Chemistry is the study of the substances in our world. This course is a full and challenging study of Chemistry and its relevance. It provides an excellent basis for further study in Chemistry at Year 12 level and beyond.

### **How will I learn?**

Chemistry is an experimental science so there is plenty of practical work. Discussion, notes, examples and tests will also be used to help improve understanding and knowledge of Chemistry. See also the footnote about competitions on the next page.

### **What subjects should I have already done?**

A Science course at Yrs 9 and 10 that included some chemistry topics such as gas tests, atomic structure and types of chemical reactions.

### **Where does this subject lead?**

Year 12 and Year 13 Chemistry. Chemistry is needed for a wide range of courses at tertiary level and for many occupations.

### **How is the course assessed?**

By five achievement standards, one of which is internal (practical investigation – 4 credits) and four external standards (16 credits).

### YEAR 12 NCEA LEVEL 2

### **What is this subject about?**

Chemistry has fundamental importance as the study of the properties and reactions of substances and has great relevance to students' everyday lives. The course includes topics such as: organic and inorganic substances; atomic structure and bonding; reduction-oxidation reactions and quantitative analysis.

### **How will I learn?**

A full programme of experimental work is involved, as well as discussions, notes and examples. See also the footnote about competitions.

### **What subjects should I have already done?**

NCEA Level 1 Science with a minimum of 16 credits and an Achieved grade in the chemistry based standard (90189), or 16 credits in NCEA Level 1 Chemistry.

### **Where does this subject lead?**

Year 13 Chemistry, NCEA level 3.

### **How is the course assessed?**

By achievement standards, three of which (90305-6, 90763) are assessed internally (8 credits) during the year and four (90308-11) by external examination (16 credits)

### YEAR 13 NCEA LEVEL 3

### **What is the subject about?**

This course follows the NCEA level 2 course and includes more advanced work on: organic and inorganic substances; reduction-oxidation reactions; atomic structure, bonding and the Periodic Table; aqueous solutions and energy changes. Interesting contexts relate the chemical theory to students' everyday experiences.

**How will I learn?**

Through experimental work, discussion, notes and examples. At this level background reading is also vital. Part of the programme at this level is the extended practical investigation on a topic chosen by the student. See also the footnote about competitions

**What subjects should I have already done?**

NCEA level 2 Chemistry, with a minimum of 16 credits achieved, and a reasonable standard of achievement in NCEA level 2 Mathematics.

**Where does the subject lead?**

Chemistry is essential for many careers and is also a central link between many other sciences. This subject is a pre-requisite for a large number of tertiary courses and occupations.

**How is the course assessed?**

Progress is monitored by assignments, practical reports, tests and examinations. The course is assessed by achievement standards, two (90694-5) internally assessed (a practical investigation and a titration - 6 credits) and four (90696, 90698, 90700, 90780) externally assessed (18 credits).

**Competitions:**

Year 11, 12 and 13 chemistry students enter the Australian National Chemistry Quiz and Year 12 and 13 students may also enter the NZIC interschool quiz.

## CLASSICAL STUDIES

**What special skills do I acquire?**

Research, textual analysis, interpretation of evidence, discussion, and argumentation.

**What is this subject about?**

It is a broad subject which introduces the civilisations of Greece and Rome, and their contribution to the development of the modern Western world. It includes topics from art, history, literature, drama, religion, mythology, philosophy, architecture, and archaeology. So it is possible to get an idea of the full experience of life in the ancient world.

### YEAR 12 NCEA LEVEL 2

**How will I learn?**

Topics are Epic Poetry (The Odyssey); Political History (Athenian Democracy or Rome);

Art and Architecture (Pompeii and Herculaneum); mythology, and tragedy. Reading and analysing prescribed texts, discussion, presentations, research.

**What subjects should I have already done?**

At least 32 credits from two of History, Geography, or English.

**Where does this subject lead?**

Directly into Level 3 Classics and Humanities, Social Sciences or Law at university.

**How is the course assessed?**

There are 24 credits available, 15 external (AS 90247-9) and 9 internal (AS 90250-1).

### YEAR 13 NCEA LEVEL 3

**How will I learn?**

Topics can include old comedy (Aristophanes); epic poetry (Virgil); political and military history (Alexander the Great or Augustus); art (Greek vase painting or Roman art and architecture); plus religion and mythology. Reading and analysing prescribed texts, discussion, presentations, research.

**What subjects should I have already done?**

At least 32 credits from two of Classical Studies, History, Geography, English or Drama. Level 2 Classical Studies is recommended but not essential.

**Where does this subject lead?**

Directly into a Classics, Classical Studies, or Ancient History major at university. Useful background for anyone intending to study Humanities, Social Sciences or Law.

**How is the course assessed?**

24 credits are available, 18 external (AS90511-3) and 6 internal (AS 90514).

## COMPUTER STUDIES

### YEAR 12 NCEA LEVEL 2, NATIONAL CERTIFICATE OF COMPUTING LEVEL 2

**What is this subject about?**

This is a general course that covers hardware and how computers operate, file management and security, application software such as spreadsheets, databases and desktop publishing. The course also covers creating web pages and using ICT as a tool to solve problems.

**How will I learn?**

The emphasis is on 'hands on' experience, supported by the necessary theory.

**What subjects should I have already done?**

No prior knowledge of computing is needed. Enthusiasm, self-discipline and genuine interest are the essential ingredients plus a minimum of 14 credits in NCEA 1 Maths and English.

**Where does this subject lead?**

This course will lead directly to Year 13 Computer Studies. It will also have applications in your other studies, in the world of work, entertainment, communications and for tertiary study.

**How is this course assessed?**

Internally assessed unit standards (Core: NC111, 2784, 2781, 2786, 2788, 15167. Optional: 15168, 557, 2791, 18740). Places are restricted.

## YEAR 13 NCEA LEVEL 3, NATIONAL CERTIFICATE IN COMPUTING LEVEL 3

**What is this subject about?**

This is a more advanced computer studies course. It will cover programming, networks, and components of a PC as well as how computers are used in organisations. It may also include WebPages and/or advanced applications such as databases and spreadsheets.

**How will I learn?**

The emphasis is on 'hands on' experience, supported by the necessary theory.

**What subjects should I have already done?**

Year 12 Computer Studies is recommended. Students may be admitted who have not completed Year 12 Computer Studies if their academic record is of the appropriate standard.

**Where does this subject lead?**

This course leads to tertiary level studies in this field or related subjects.

**How is the course assessed?**

Internally assessed unit standards (Core: NC112, 2785, 2787, 2797. Optional: 2789, 5940 and 1841). Places are restricted.

# DRAMA

**What special skills do I acquire?**

Drama is an excellent choice for gaining confidence and personal development. Students develop the ability to sustain and deliver acting roles through several styles of performance. They will work collaboratively and independently during the process of drama making and use communication and analytical reflection to develop an understanding of the context of drama in our society and the world. You will be expected to attend a number of live performances to develop reflective practice.

## YEAR 11-13 NCEA LEVELS 1-3

**What is the subject about?**

There are four strands: developing practical knowledge in drama; developing ideas in drama; communicating and interpreting drama; understanding drama in context. We cover drama techniques, elements and conventions, theatre study and a production role.

**How will I learn?**

Through performance and research assignments, the review and evaluation of your own and others' work, and the regular workshopping of dramatic elements, techniques and conventions.

Assessment will be carried out throughout the year.

**What subjects should I have already done?**

You will have had some experience of drama at Year 10. If not, you must have had practical experience in drama.

**Where does the subject lead?**

The natural progression would be to further NCEA Levels including Scholarship. Tertiary drama courses are available at universities and drama schools around Australasia.

**How is the course assessed?**

By achievements standards, predominately internal assessment but each level does have some external assessment as well.

# ECONOMICS

## **What special skills do I acquire?**

The skills of thinking, investigating, dealing with statistics and decision-making are all developed through the study of material which relates to every day economic activity.

## YEAR 11 NCEA LEVEL 1

### **What is this subject about?**

Students study how producers and consumers interact through the market. The three major areas of study are: producers' decisions, consumers' decisions and the market.

### **How will I learn?**

Through investigation, discussion, experimentation and the study of economic literature.

### **What subjects should I have already done?**

Year 10 Enterprise Studies provides a useful background but is not necessary.

### **Where does this subject lead?**

To Year 12 and Year 13 Economics. It provides a background which is useful in all aspects of working and personal life.

### **How is the course assessed?**

12 credits will be assessed internally and 12 externally.

## YEAR 12 NCEA LEVEL 2

### **What is this subject about?**

The exploration of the economic issues of employment, trade, growth, inflation and inequality.

### **How will I learn?**

Through discussion, research and study of economic literature.

### **What subjects should I have already done?**

Year 11 Economics is an advantage but not a pre-requisite.

### **Where does this subject lead?**

It leads on the Year 13 Economics or can be used as a one-off study to broaden one's education. It is useful in areas such as Accounting and Business Studies.

### **How is the course assessed?**

6 internal credits (AS 90760) and 18 external (AS 90238, 90758-9, 90761-2).

## YEAR 13 NCEA LEVEL 3

### **What is this subject about?**

Basic economic concepts and principles, and their application to current issues; the inter-relationships between economic, social and political events; resource allocation via the market system and the public sector; aggregate economic activity and policy.

### **How will I learn?**

Through discussion and study of economic literature.

### **What subjects should I have already done?**

Year 12 Economics – 16 credits at NCEA level 2.

### **Where does this subject lead?**

Commercial courses at Universities or Polytechnics. It also provides a general understanding of economics which is applicable to all vocations and every day life.

### **How is the course assessed?**

5 credits (AS 90633-4) are assessed internally and 19 externally (AS90629-32)

# ENGLISH

## **What special skills do I acquire?**

An ability to recognise and use language appropriate to a wide variety of situations, to be confident and competent in the use of the English language, to communicate through written, oral and visual language; an awareness and appreciation of literature. English helps the building of confidence and competence in the oral and written communication skills which are needed in all aspects of study, work and life beyond school.

## YEAR 11 NCEA LEVEL 1

### **What is the subject about?**

English language and literature, developing written, oral and visual language skills.

### **How will I learn?**

By a combination of written and spoken classwork, reading and study of texts, exploration of language, research, production activities related to drama and the media.

### **What subjects should I have already done?**

Two years of Secondary School English.

**Where does this subject lead?**

The language skills developed lead to the study of English in Years 12 and 13.

**How is this course assessed?**

By achievement standards with 12 credits internally and 12 credits externally.

## YEAR 12 NCEA LEVEL 2

**What is the subject about?**

The study of English language and literature and the development of written, oral and visual language skills.

**How will I learn?**

By a combination of written and spoken classwork, reading, analysis and interpretation of texts, exploration of language; research; and production activities related to drama and the media.

**What subjects should I have already done?**

NCEA Level 1 with 16 credits (including any two external standards) if a satisfactory participation in this course is to be expected (or overseas equivalent).

**Where does this subject lead?**

The language and thinking skills developed lead to the study of English in Year 13

**How is the course assessed?**

By achievement standards with 12 credits internally and 12 credits externally.

## YEAR 13 NCEA LEVEL 3

**What is this subject about?**

This course involves the development of your written, oral and research skills. The literature component includes the study of one play by Shakespeare and the works of other major authors, including New Zealand writers.

**How will I learn?**

Skills involved include: reading, analysing and interpreting texts; critical and imaginative thinking; asking relevant and perceptive questions; developing awareness of styles of writing; formulating, organising and illustrating ideas; expressing personal responses; participating effectively in discussion; and writing academic essays.

**What subjects should I have done already?**

You cannot expect to cope with level 3 English unless you have achieved sound results at

NCEA level 2 English. This means 15 credits at level 2 including AS 2.6 and any one of 2.3, 2.4 or 2.5. A willingness to read texts closely is essential to the course as well as a genuine passion for reading beyond the classroom.

**Where does this subject lead?**

The specific skills of literary and linguistic analysis and interpretation developed in the course are directed applicable to virtually all tertiary courses in the Humanities.

**How is the course assessed?**

By achievement standards with 12 credits internally and 9 credits externally.

# GEOGRAPHY

**What special skills do I acquire?**

The gathering and processing of data; mapping, measurement and field work; social and valuing skills; decision making.

## YEAR 11 NCEA LEVEL 1

**What is the subject about?**

Year 11 Geography looks at the environment as the home of people. On a national and international basis we study natural hazards (eg 2004 tsunami), population and resource use (agriculture and mining) as well as current issues and a global study.

**How will I learn?**

Learning activities include class activities and discussions, practical exercises, map and photograph interpretation, and assignments as well as video presentations. Field trips are also part of the course as is using the internet.

**What subjects should I have already done?**

The skills developed in Social Studies and English provide all students with the basis for geographical study.

**Where does this subject lead?**

This course leads to Years 12 and 13 Geography. Careers using geography skills include law, public relations, foreign service, tourism, resource management, market research, management, town planning and statistics.

**How is the course assessed?**

By achievement standards, 13 of which are internally assessed and 12 of which are external.

## YEAR 12 NCEA LEVEL 2

### **What is this subject about?**

Year 12 Geography looks at the relationships of people and the environments in which they live. We study natural landscapes, urban settlements, development inequalities and current issues, both within New Zealand and overseas.

### **How will I learn?**

Learning activities include class activities and discussions, practical activities, map and photograph interpretation, and assignments. Field trips are also part of the course.

### **What subjects should I have already done?**

Year 11 Geography is an advantage, but not an essential requirement of this course.

### **Where does this subject lead?**

This course leads to Year 13 Geography. Careers using geography skills include law, public relations, foreign service, tourism, resource management, market research, management, town planning and statistics.

### **How is the course assessed?**

By achievement standards, 11 of which are internally assessed and 13 of which are external.

## YEAR 13 NCEA LEVEL 3

### **What is the subject about?**

Year 13 Geography is about processes that operate in our global environment today. We look at a natural environment (Miramar peninsula) and the processes (eg coastal) that are at work there and at a cultural process (eg tourism). We also look at planning issues.

### **How will I learn?**

Learning activities include class activities and discussions, practical exercises, map and photograph interpretation, individual research as well as video presentations. Field trips are also part of the course as is using the internet.

### **What subjects should I have already done?**

Year 11 and Year 12 Geography is helpful and an advantage, but not an essential requirement of this course.

### **Where does this subject lead?**

This course leads directly to Geography at tertiary institutions. Careers using geography skills include law, public relations, foreign service, tourism, resource management, market research, management, town planning and statistics.

### **How is the course assessed?**

12 credits are internally assessed and 12 externally.

## FIELD TRIPS:

### **Year 11:**

There is a field trip to Wairarapa to study resource use (viticulture). There is also a day trip to Harcourt Park, and other sites around Wellington, to study the damage caused by earthquakes.

### **Year 12:**

There is a field trip to Tongariro volcanic plateau as well as a study of Wellington's urban environment.

### **Year 13:**

There is a field trip to Rotorua investigating the tourist industry. There is also a trip to Breaker Bay to investigate the natural and cultural processes that are shaping the environment in that area.

# GRAPHICS

## YEAR 11 NCEA LEVEL 1

### **What is the subject about?**

This course introduces students to a range of graphical skills including; design process, freehand sketching, 2D and 3D instrumental drawing, rendering, design principles, presentation methods. These skills will be implemented within the areas of architecture, product design and media design.

### **How will I learn?**

A project based, design brief approach is applied throughout the course. Students will be expected to show competence in the assigned activities and the visual communication of ideas to solve set design problems.

### **What subjects should I have done already?**

Year 10 Graphics (strongly recommended)

### **Where does this subject lead?**

In year 12 students will complete an advanced course that covers the areas of;

Architecture, Industrial design and Media design. This subject prepares students for a future in the fields of; architecture, engineering, industrial design, graphic design, web design, draughting, etc.

#### **How is this course assessed?**

Students work is assessed using both internal and external achievement standards.

Evidence for the external standards is accumulated within each of the units and then submitted at the end of the year and sent to NZQA for external marking.

#### **Other details:**

There will be a cost set each year to cover specialist graphics materials used.

## YEAR 12 NCEA LEVEL 2

#### **What is the subject about?**

This course introduces students to an advanced level of graphical skills including; design process, freehand sketching, 2D and 3D instrumental drawing, rendering, design principles, presentation methods, and computer software. These skills will be implemented with in the areas of architecture, product design and media design.

#### **How will I learn?**

A project based, design brief approach is applied through out the course. Students will be expected to show competence in the assigned activities and the visual communication of ideas to solve set design problems.

#### **What subjects should I have done already?**

Successful completion of the Year 11 Graphics course is a prerequisite.

#### **Where does this subject lead**

In year 13 students will complete an advanced course that covers the areas of; Architecture, Industrial design, Media design. This subject prepares students for a future in the fields of; architecture, engineering, industrial design, graphic design, web design, draughting, etc.

#### **How is this course assessed?**

Students work is assessed using both internal and external achievement standards.

Evidence for the external standards is accumulated within each of the units and then submitted at the end of the year and sent to NZQA for external marking.

#### **Other details:**

There will be a cost set each year to cover specialist graphics materials used.

## YEAR 13 NCEA LEVEL 3

#### **What is the subject about?**

This course exposes students to a range of advanced graphical skills including; design process, freehand sketching, 2D and 3D instrumental drawing, rendering, design principles, presentation methods, planning and project management, and interaction with a client. These skills will be implemented with in the areas of architecture/ environmental design, and media design.

#### **How will I learn?**

A client focused design brief approach is applied through out the course. Students will be expected to show competence in the assigned activities and the visual communication of ideas to solve set design problems to meet a clients needs.

#### **What subjects should I have done already?**

Successful completion of the Year 12 Graphics course is a prerequisite.

#### **Where does this subject lead?**

A range of career opportunities include a future in the fields of; architecture, engineering, industrial design, graphic design, web design, draughting and urban planning.

#### **How is this course assessed?**

Students work is assessed using both internal and external achievement standards.

Evidence for the external standards is accumulated within each of the units and then submitted at the end of the year and sent to NZQA for external marking.

#### **Other details:**

There will be a cost set each year to cover specialist graphics materials used.

# HISTORY

#### **What is the subject about?**

History is an examination of people, societies, events and ideas from the recent and distant past. Students of history develop research and presentation skills, learn to discriminate between fact and opinion, and assess the usefulness and reliability of information. Literacy is enhanced by reading a variety of texts and developing formal essay-writing skills.

### **Where does the subject lead?**

History study is important for careers in law, diplomacy, international relations, public policy, military and economic analysis. Many government departments employ historians as policy analysts. Historians also pursue careers in journalism, tourism, education, writing, research, information management (libraries and archives), archaeology and museum or gallery work.

At a school level, history is symbiotic with Classics, Geography, Economics and Art History. It also offers important background knowledge of the application of sciences, especially physics and chemistry, but also environmental issues.

## **YEAR 11 NCEA LEVEL 1**

### **What will I study?**

Students will study a selection of the following topics:

- Conflict in Ireland
- The Origins of World War 2
- New Zealand Search for Security
- Stalin and the Soviet Union
- Black Civil Rights in the USA.

### **How will I learn?**

Students will examine, analyse and compare sources of evidence. You will collect information from the writings of historians and complete your own research using a wide variety of sources. You will learn to present information in essays and other forms.

### **What subjects should I have already done?**

Social Studies and English at year 10 provide all students with the basic skills they need. Literacy and an independent reading habit are very useful. An interest in history, conflict and international relations is desirable, but not necessary.

### **How is the course assessed?**

24 credits total, 12 credits externally examined and three internal assessments for the other 12 credits. The internal assessments are research, presentation of research and perspectives. The external assessments are source analysis, essay writing and events in a New Zealand topic.

## **YEAR 12 NCEA LEVEL 2**

### **What will I study?**

- The Cold War 1945-91, including sub-topics such as the Korean War, Cuban Missile Crisis, Berlin Wall, Nuclear Proliferation and the collapse of the Eastern Bloc.
- Vietnam's Struggle for Independence, 1945-75
- Weimar and Nazi Germany (Usually dependent on time)

### **How will I learn?**

Students will examine, analyse and compare sources of evidence. You will collect information from the writings of historians and do your own research using the internet, books, journals, magazines, videos and web-quests. The ability to write well structured essays is crucial to success at Level 2 and developing this skill is a priority. A field trip to Vietnam is also a possibility in 2011.

### **What subjects should I have already done?**

16 credits in Level 1 History are desirable but exceptions may be made for candidates who have been successful in Level 1 Geography or English.

### **How is the course assessed?**

24 credits total, 12 credits externally examined and three internal assessments for the other 12 credits. The internal assessments are research, presentation of research and perspectives. The external assessments are source analysis, and two essays, one on historical movements and the other development of group identity.

## **YEAR 13 NCEA LEVEL 3 AND SCHOLARSHIP**

### **What will I study?**

Students study one topic, 19<sup>th</sup> Century New Zealand. The first half of the year looks at race relations. In the second half of the year we examine the creation of Pakeha New Zealand.

### **How will I learn?**

Students will examine, analyse and compare sources of evidence. You will collect information from the writings of historians and complete your own research using the internet, books, journals, magazines, videos and webquests. A three day field trip to Wanganui and South Taranaki is an essential part of the learning process for this course. Additional half and full day field trips to archives, museums, libraries and historic sites are also undertaken. The ability to discuss critically the writings of historians who have studied New Zealand in the Nineteenth Century is the key skill students need to master.

Students are also expected to examine sources of evidence more critically and discuss them in greater depth and at greater length than at Level 2.

### **What subjects should I have already done?**

16 credits in Level 2 History, including at least one of the essay standards are desirable but exceptions may be made for candidates who have been successful in Level 2 Classical Studies.

### **How is the course assessed?**

9 credits from internal assessments (research and presentation). 15 credits from external examination (source analysis and two essays).

## LANGUAGES

### **What special skills do I acquire?**

Learning foreign languages helps to break down the barriers between the different peoples of the world. It develops memory, flexibility in thought and sensitivity to others. With growing internationalism, the student of languages has an increasing advantage in business, travel and pleasure.

### YEARS 11, 12 AND 13

### NCEA LEVELS 1-3, AND SCHOLARSHIP

#### **French / Japanese / Spanish**

The two languages currently offered at Scots College at NCEA are French and Japanese, and these can be studied right through to Scholarship level. It should be noted that Spanish has now also been introduced into the College, and will be available as an NCEA subject from 2012.

### **What are these subjects about?**

Both the written and spoken languages are studied, as well as the culture of each country. Language studies also focus on developing academic potential as they involve modes of learning which are often different from other subjects, and they demand different skills from students.

### **How will I learn?**

Since language learning is cumulative, you will continue to add to your knowledge using a combination of the same methods – theory and practice. Learning a language is very similar to learning to play a musical instrument, and just as worthwhile.

### **What subjects should I have already done?**

Foreign languages may well represent a new area to you. All your previous knowledge and experience of language work, foreign or otherwise, is relevant. The foreign language should have been studied from Year 9 onwards. Studying a language for two years (about 200 hours of instruction) provides a sound platform for future study, and it is only this further study which produces the real benefits.

### **Where do these subjects lead?**

Learning a foreign language is not only utilitarian (for travel and business) but it develops new mental capacities and insights. For New Zealand in particular, it is a bridge to the outside world; French is one of the major languages of Europe and the Pacific, while Japanese is one of the major languages of the Pacific basin, and developing fluency in these languages can only be an asset.

### **How are the courses assessed?**

There are five achievement standards to be completed in each of years 11, 12 and 13. Two of these (Listening and Reading) are assessed externally at the end of the school year. The remaining three (Oral presentation, Oral dialogue and a Writing assignment) are assessed internally. Monitoring of classwork and homework is continuous and serves vitally to reinforce the material being taught.

### **Other details:**

The College and Languages department in particular benefit from numerous overseas connections.

Scots College has a sister school relationship with Toin Gakuen in Yokohama, Japan. Ten Japanese students are hosted at Scots in March, and ten Scots students visit Japan in September each year. This is an excellent opportunity for year 10 students to be involved in hosting, and in a cultural trip to Japan.

The French department is regularly offering a study trip to Nouméa in New Caledonia during the September break. This trip is run in conjunction with *CREIPAC*, the body which organizes homestay and French classes for visiting school groups, and is invaluable to our young men who are studying French. In addition, the first leg of an inaugural school exchange has taken place this year, with a group of our senior students of French having undertaken a wonderful visit to Northern France, encompassing time spent at the Lycée Baudimont in the town of Arras.

The Spanish department is currently developing links with the Mackay School in Chile. In May this year, we will be hosting 12 students from Chile for four weeks. In turn, students

from years 12 and 13 will be hosted in Chile next year. As the Department grows, it is hoped that this opportunity will eventually be extended to students in other years.

Students are also encouraged to take advantage of other cultural and language opportunities inside and outside school through film, TV, the international press and Internet sites, with local speech competitions also a regular feature of the school year.

### **Correspondence School**

Several languages not offered at Scots College may nonetheless be studied through correspondence. The College can provide monitoring of the progress of the student and act as liaison with the Correspondence School. A student needs maturity and good work habits to undertake this form of study. It is not recommended as an alternative to full in-house study.

## MATHEMATICS

### **What special skills do I acquire?**

Logical and systematic thinking, presentation and critical analysis of data; solving problems both familiar and unfamiliar; number processing using calculator and computer. The more able students enter the Australian Maths Competition, the Senior and Junior Maths Competitions and the ICAS Maths Competition all of which have a small charge of around \$5.

### YEAR 11 NCEA LEVEL 1

#### **What is this subject about?**

It deals with mathematical theory and its application in real life situations. It covers number, algebra, geometry, trigonometry and statistics.

#### **How will I learn?**

By working on exercises and problems at home and at school.

#### **What subjects should I have already done?**

Year 10 Mathematics with a mark of about 35% or better probably being necessary to achieve some success at NCEA level 1.

#### **Where does this subject lead?**

It will lead directly to Level 2 and 3 NCEA Mathematics and to IB Standard Level. Those intending to do IB Higher Level should consider doing NCEA Level 2 Mathematics in Year 11.

### **How is the course assessed?**

Through a mix of internally and externally assessed achievement standards (20 Level 1 credits and 2 Level 2 credits). The students have already attempted two internal standards in year 10 totalling 5 credits, 90149 (measurement) and 90150 (geometric design). In year 11 they will do three internally assessed standards (10 credits) on number and statistics (Level 1) and trigonometry (Level 2) and three externally assessed standards through an exam at the end of the year (12 credits: algebra, geometric reasoning and probability).

For weaker students, alternative internally assessed achievement standards may replace some or all of the externally assessed standards, but this would preclude the students from doing Level 2 Mathematics the following year.

### YEAR 12 NCEA LEVEL 2

#### **What is this subject about?**

The course continues and extends the work of Year 11. Topics include algebra, co-ordinate geometry, trigonometry, sequences, statistics, and calculus.

#### **How will I learn?**

By working on problems at home and at school

#### **What subjects should I have already done?**

This subject is for students who have achieved NCEA level 1 with at least 16 credits. Students should have gained at least an achieved grade in AS 1.2 Graphs, 1.5 Statistics, 1.7 Number, 1.8 Trigonometry and hopefully a merit grade in 1.1 Algebra. Students not satisfying these criteria will find the level 2 course very challenging and entry will be at the discretion of the Director of Studies or HoD Mathematics.

#### **Where does this subject lead?**

It will lead on to either (or both) of the two level 3 Mathematics courses.

#### **How is the course assessed?**

This course will be assessed through a mixture of three internally assessed (5 credits 90288-9 – AS 90291 trigonometry has already been assessed at year 11) and five externally assessed (17 credits) achievement standards (90284-7, 90290, 90292)

### YEAR 13 STATISTICS NCEA LEVEL 3

#### **What is this subject about?**

All the topics in this course have practical applications. About half the course is statistics and probability. The other half of the course includes algebra and graphs. There is no

overlap between this course and mathematics with calculus and the courses may be studied concurrently.

#### **How will I learn?**

You will develop your mathematical skills by working on problems.

#### **What subjects should I have already done?**

This subject is for students who have achieved NCEA level 2 with at least 12 credits in mathematics. More importantly, students should have achieved at least an achieved grade in AS 2.1 Algebra, 2.2 Graphs, 2.5 Sampling and 2.6 Probability. Students who do not satisfy these requirements will find this level 3 course very challenging and entry will be at the discretion of the Director of Studies or the HoD Mathematics.

#### **Where does this subject lead?**

You could take Statistics if you plan to study mathematics, social sciences, economics, biology, accountancy, geography or any other topic that requires statistics at tertiary level. It would be an appropriate background for any job that involves practical applications of the topics listed above.

#### **How is the course assessed?**

This course will be assessed through three internally assessed achievement standards (90641, 90645, 90647 worth 9 credits) and four externally assessed standards (90642-4, 90646, worth 15 credits).

## YEAR 13 CALCULUS NCEA LEVEL 3

#### **What is this subject about?**

This course continues and extends the work started in Year 12 on algebra, co-ordinate geometry, trigonometry and calculus, with a new topic, complex numbers

#### **How will I learn?**

You will develop your mathematical skills by working on problems in class and at home.

#### **What subjects should I have already done?**

This subject is for students who have achieved NCEA level 2 with at least 16 credits in mathematics. More importantly, students should have achieved at least an achieved grade in Achievement Standards 2.1 Algebra, 2.2 Graphs, 2.3 Calculus, 2.4 Coordinate Geometry, 2.8 and 2.9 Trigonometry. Students who do not satisfy these requirements will find this level 3 course very challenging and entry will be at the discretion of the Director of Studies or Head of Mathematics.

#### **Where does this subject lead?**

You should take calculus if you intend to study pure sciences or engineering at university, or if you are studying physics at Year 13 level and intend to continue with it at university. It will also be suitable for other students with a genuine interest in mathematics. It is advisable for students intending to study economics at university to do calculus.

#### **How is the course assessed?**

This course will be assessed through a mixture of internally and externally assessed Achievement Standards (24 credits). One standard (90637) will be internally assessed, with 4 credits. The remaining four standards (90635-6, 90638-9) will be externally assessed through an exam at the end of the year and will total 20 credits.

## WHICH SHOULD YOU CHOOSE – CALCULUS OR STATISTICS OR BOTH?

As mathematics (and we include statistics) is used in so many university courses, our first piece of advice is that you should continue with mathematics in Year 13. There is some advantage in taking both mathematics subjects as they tend to reinforce each other so that you will probably do better in each than if you took one by itself. If you do not intend going to university after Year 13 then statistics is preferred. If you decide on one paper, you should be guided by what courses you intend doing at university. For engineering, and further study in mathematics, statistical theory and physics beyond the first year level, taking both subjects is probably best, but if you decide to take one, it should be calculus. On the other hand, if you are interested in the social and life sciences, statistics is more appropriate. For commerce, calculus would be preferable particularly if you wish to continue with economics or finance. It is extremely difficult to pick up calculus at university if you have taken only statistics at school, but 'less difficult' for a calculus student to pick up statistics.

## MUSIC

#### **What special skills will I acquire?**

Music is a skill that will last you for the rest of your life. You will learn to confidently perform as a soloist or in an ensemble, write your own music, learn about different styles of music, unpack the mysteries of written and aural music to help you enjoy music as a career or as a passionate pastime.

You will also develop the following qualities: imagination, concentration, focus, self discipline, ability to learn quickly from mistakes, perform to a high standard always, ability to self reflect and analyse, ability to work well in groups and alone

## YEAR 11 PERFORMANCE MUSIC – NCEA LEVEL 1

The course covers performing as a soloist and in an ensemble, writing your own music, analyzing and understanding classical, jazz, rock music in a historical context as well as extending your written and aural skills.

You will also embark on the beginning of a three year Film Music Composing Course, that will give you the skills to work in the film and television industry as a film composer, sound editor, sound engineer or orchestrator. This year will focus on Film Theme Song Writing

### **How will I learn?**

You will learn through listening, performing, creating and studying music throughout the year. A total of 22 credits are internally assessed.

### **What subjects should I have already done?**

You must be having regular lessons on an instrument (voice is considered an instrument). Music is a specialist area and you have reached a certain performance level on your instrument. Music in Year 10 is preferred but entry is at the discretion of the Director of Music.

### **Where does this subject lead?**

From NCEA Level 1 through level 2 and 3, and scholarship to enter study at tertiary level or to become a professional musician.

### **How is the course assessed?**

The course is assessed as follows: performance as a soloist, performance in a group situation, composing your own music, analyzing and understanding music – all internally assessed. Aural skills and score-reading are external exams. Students must perform and participate in co-curricular ensemble groups. There are 4 internal achievement standards and 2 external achievement standards. The internals are assessed throughout the year and are completed by end of third term. There are 2 external achievement standards that are examined at the end of the year. Approximately 60% of the coursework is weighted to internal and 40% to external assessment.

## YEAR 12 PERFORMANCE MUSIC – NCEA LEVEL 2

The course is divided into five areas: performance, composition, aural and analytical skills,

musical knowledge, musical arrangement. You will be studying the second year of a three year Film Music Composing Course. This will give you the skills to work in the film and television industry as a film composer, sound editor, sound engineer or orchestrator. This year will focus on film scoring and sound editing.

### **How will I learn?**

You will learn through performance, composition assignments, the analysis and study of set works and regular aural exercises. Assessment will be carried out throughout the year. All students will be receiving individual private lessons on their performance instrument in order to advance their skills. Participation in co-curricular music is encouraged.

### **What subjects should I have already done?**

You will need to have achieved the performance and/or composition Achievement Standard credits in Year 11 performance music or have equivalent music skills at this level. Acceptance into the course is at the discretion of the Director of Music. You must be attending regular lessons on your performance instrument, (including voice).

### **How is the course assessed?**

Internal assessments cover performing as a soloist and in an ensemble, composition, instrumentation, and musical knowledge. Aural skills and analysis are tested through an external examination. Students are encouraged to take a leadership role in co-curricular music becoming role models for younger students. There are 3 to 4 internal achievement standards and 2 external achievement standards. The internals are assessed throughout the year and are completed by end of third term. There are 2 external achievement standards that are examined at the end of the year. Approximately 70% of the coursework is weighted to internal and 30% to external assessment.

## YEAR 13 PERFORMANCE MUSIC – NCEA LEVEL 3 – SCHOLARSHIP

The course now follows two distinct strands of Practical Music and Music Studies. A student may choose a combination of credits across both strands. At this level, students design an individual course to suit their interests and strengths. This is the third year of a three year Film Music Composing Course. It will give you the skills to work in the film and television industry as a film composer, sound editor, sound engineer or orchestrator. This year will focus on concept album writing to film. The entire class will be working on a Concept Album Project to be performed and recorded at the year's end.

## **Practical Music**

The course is divided into two sections (i) Making Music (Performance) and (ii) Music Studies. Scholarship Music also carries a Research and Lecture Presentation. There will be regular assignments and assessment opportunities throughout the year. Students will be encouraged to take a lead role in the co-curricular music events and groups.

### **How will I learn?**

You will learn through private practice, the application of theoretical and analytical skills, composition of music for a variety of competitions and performances, detailed study of set works, research and regular performance.

### **What subjects should I have already done?**

You must have attained the performance and/or compositional Achievement Standards at Level 2 or have equivalent skills at this level. You must be attending private lessons with an instrument tutor.

### **Where does this subject lead?**

Success at this level enables students to enter tertiary institutions to continue music Studies in all genres or to take up a career as a performer.

### **How is the course assessed?**

As students will be following an individualized programme according to their strengths, assessment will involve a combination of internal and external assessments. There are 4 internal achievement standards and 2 external achievement standards. The internals are assessed throughout the year and are completed by end of third term. There are 2 external achievement standards that are examined at the end of the year. Approximately 70% of the coursework is weighted to internal and 30% to external assessment.

# PHYSICAL EDUCATION

## YEAR 11 NCEA LEVEL 1

### **What is the subject about?**

It aims to further develop the students' background knowledge and understanding of the theory and principles of Physical Education.

### **How will I learn?**

The course has both theory and practical components. The practical components will involve five athletic events, touch rugby and three other different physical activities.

### **What subjects should I have already done?**

A reasonable level of fitness is a necessary pre-requisite.

### **Where does this subject lead?**

NCEA levels 2,3 and any sports related tertiary study (eg physiotherapy, physical education).

### **How is this course assessed?**

All the achievement standards are internally assessed (and externally moderated).

## YEAR 12 NCEA LEVEL 2

### **What is the subject about?**

It aims to further develop the students' background knowledge and understanding of the theory and principles of Physical Education.

There are seven achievement standards 90432-4, 90436-9)

- 2.1 Monitoring personal performance in regular exercise
- 2.2 Principles of anatomy and bio-mechanics relating to physical activity
- 2.3 Training methods and how they apply to participation in physical activity.
- 2.5 Performance in two contrasting physical activities
- 2.6 Sociological significance of a sporting event
- 2.7 Leadership roles in a group or team physical activity
- 2.8 Safety issues and safety management procedures

### **How will I learn?**

The course is equally balanced between theory and practice. Lectures, seminars, laboratory experiments, visiting speakers and practical gymnasium sessions are the means of ensuring that all concepts are fully understood. There are field trips such as a kayaking adventure to the Marlborough Sounds.

### **What subjects should I have already done?**

A reasonable level of fitness is a necessary pre-requisite.

### **Where does this subject lead?**

Any sports related tertiary study (eg physiotherapy, physical education).

### **How is this course assessed?**

All the achievement standards listed above are internally assessed.

## YEAR 13 NCEA LEVEL 3

### What is the subject about?

It provides learning experiences that promote an understanding of the need for a physically active and healthy lifestyle. It also develops the understandings and skills which underpin successful physical activity.

There are five achievement standards (90739-90743)

- 3.1 Planning an activity programme
- 3.2 Reviewing an activity programme
- 3.3 Appraising performance and evaluating performance improvement plan
- 3.4 Demonstrating performance
- 3.5 Examining a current trend

### How will I learn?

The course involves a variety of theoretical and practical learning - reports, assignments, surveys, performance. It should be noted that only one of the standards assesses actual physical performance, although practical gymnasium sessions are used to ensure that all concepts are fully understood. Participation in a triathlon is required.

### What subjects should I have already done?

NCEA level 2 Physical Education is strongly recommended but not essential.

### Where does this subject lead?

Any sports related tertiary study (eg physiotherapy, physical education).

### How is the course assessed?

All the achievement standards listed above are internally assessed (and externally moderated)

# PHYSICS

### What special skills do I acquire?

Use of the scientific method; use of equipment both simple and complex; observational and planning skills; ability to manipulate formulae.

## YEAR 11 NCEA LEVEL 1

Note: Check the general guidelines on page 8 regarding choice of Year 11 science subjects.

### What is this subject about?

It is all about how and why things happen around us involving matter, energy and

the relationship between them. Energy in its various form: heat, light, electrical and mechanical. Accounting for energy transfer.

### How will I learn?

By studying various theories and relating them to the measurements observed in practical sessions. By dealing with numerical problems. By reading, research. and computer simulation.

### What subjects should I have already done?

The normal Yr 10 course in science leads into Yr 11 physics, but students who are not above average in science and maths will find it very difficult to succeed in physics.

### Where does this subject lead?

Jobs connected with engineering, electrical work, optometry, aviation, architecture require Physics; as do tertiary qualifications in these areas. Year 11 Physics also gives students a better grounding for Year 12 and Year 13 work than does Year 11 Science.

### How is the course assessed?

By achievement standards, one of which is an internal (4 credits) and the rest (16 credits) external.

## YEAR 12 NCEA LEVEL 2

### What is this subject about?

Physics is about finding out how and why things happen.. We study motion, energy, electricity, waves, radioactivity, light, magnetism. Physics is an experimental science, where we take measurements and try to discover relationships – most often as mathematical formulas. Physicists develop theories and models to predict phenomenon and that can be tested experimentally.

### How will I learn

You will study physics in class and at home – in discussions, by reading texts, by research, by working through modules and by solving theoretical problems. You will test the theories by taking measurements in practical sessions and comparing your observations with one or more of the theories.

### What subjects should I have already done?

You should have attained 12 credits in Mathematics and 14 in Physics. At least, you should have achieved 3 of the maths standards of algebra, graphs, number, trigonometry and 3 of the physics standards of investigation, motion, electricity, waves. Level 1 Science students should have an excellence in A51.6 and A51.1

**Where does this subject lead?**

Jobs connected with engineering, electrical work, optometry, aviation, architecture require Physics; as do tertiary qualifications in these areas and health sciences.

**How is the course assessed**

Two standards (7 credits) are internally assessed (90252 Practical Skills, 90258 Integrated Physics). Four achievement standards (17 credits) are externally assessed in end of year examinations (90254-7 Waves, Mechanics, Atomic Physics, Electromagnetism )

## YEAR 13 NCEA LEVEL 3

**What is it all about?**

Physics involves finding out how and why things happen. It helps us understand the world and improve the way we live. We study energy, linear and rotational motion, AC electricity and electromagnetism, wave diffraction and interference, and atomic and nuclear physics. Physics is an experimental science, where we take measurements and try to discover mathematical relationships. Physicists develop theories and models that predict phenomenon and can be tested experimentally.

**How will I learn?**

You will study physics in class and at home by reading texts, by research, by working through modules, involvement in discussions and by solving theoretical problems. You undertake an advanced investigation.

**What subjects should I have already done?**

You should have attained 18 credits in Level 2 Physics and 12 in Level 2 Mathematics. These should include the physics standards of analysing data, waves, mechanics, electricity and maths standards of algebra, graphs, trigonometry. You are advised to study level 3 maths with calculus.

**Where does this subject lead?**

Jobs connected with engineering, electrical work, optometry, aviation, architecture require physics; as do tertiary qualifications in these areas and health sciences.

**How is the course assessed?**

One standard (5 credits) is internally assessed (90774 investigation). Four standards (19 credits) are externally assessed (90520-3 waves, mechanics, nuclear physics, electrical systems)

# SCIENCE

## YEAR 11 (ALSO 10A) NCEA LEVEL 1

**What is this subject about?**

Science involves investigating biology, chemistry, physics, geology and astronomy, as well as technological applications of their environment, and making sense of them in logical and creative ways.

**What special skills do I acquire?**

Use of a wide variety of equipment related to practical sessions in biology, chemistry and physics. Skills of the scientific method.

**How will I learn?**

A variety of experimental work is a basis of the course. Students work in the laboratory to develop practical skills and analysis, towards knowledge and understanding of science. Research skills and report writing are developed plus an online course study (live wire).

**What subjects should I have already done?**

Years 9 and 10 Science lead into the course.

**Where does this subject lead?**

The course leads to level 2 courses in biology, chemistry, and physics but the gaining of specific achievement standards is essential for adequate progress to Year 12 courses in the specialised sciences. However, students wishing to do level 2 courses are advised to take the individual sciences at level 1 (see page 6).

**How is the course assessed?**

8 credits are internally assessed achievements standards and the remaining 12 credits are externally assessed.

# VISUAL ARTS

**What special skills do I acquire?**

An ability to initiate, develop and resolve artistic ideas, communicating these in a visual art medium. Students must realise that time management is crucial and there must be a genuine interest in the subject.

## YEAR 11 NCEA LEVEL 1

### **What is this subject about?**

The Art prescription is a course of practical art activity designed for the development of personal power of expression and communication. It involves some study of the work of NZ artists, craftsmen, designers, architects, the effects of the European tradition in the arts and examples of Maori art.

### **How will I learn?**

Practical activities within a relatively tightly structured theme. The investigation and the study of various techniques and media.

### **What subjects should I have already done?**

Year 10 Art, otherwise you must discuss entry into NCEA level 1 Art with HoD Art.

### **How is the course assessed?**

Work is assessed throughout the year using internally assessed achievement standards and these cover about 45% of the course. The remainder of the course is assessed using an externally moderated achievement standard. This assessment involves the production of a folio of selected works in a range of media.

### **Other details:**

See note at foot of this page\*.

## YEAR 12 NCEA LEVEL 2

### **What is this subject about?**

This course covers an in-depth study of painting, printmaking, design and photography. It is intended as a foundation year giving students access to a range of different techniques.

### **How will I learn?**

You will develop your own Art by studying how artists work, what processes they use and how themes are developed in Art. Through your own work you will develop processes and ways of working on your own to suit your interests and abilities.

### **What subjects should I have already done?**

You should have studied Year 11 Art for NCEA Level 1. However, if you did not do Year 11 Art you may be permitted access to the course after discussion with the HoD Art.

### **Where does this subject lead?**

It leads to NCEA level 3 Visual Art. It is also useful if you wish to apply for a Polytechnic Design Course or the Craft Design Course at Whitireia Community College.

### **How is the course assessed?**

The course is made up of three internally assessed achievement standards worth 6 credits each. These assessments are on painting, printmaking and visual art design.

### **Other details:**

See note at foot of this page\*.

## YEAR 13 NCEA LEVEL 3

### **What is this subject about?**

It is a practical course with an emphasis on a high level of personal development and expertise in selected media. There are three topics – Painting, Design and Digital Photography. Each is considered a separate subject and you may choose up to a maximum of two topics. Please note: depending on the demand for IB Diploma visual art, it may be necessary to restrict the number of level 3 art options in 2010.

### **How will I learn?**

You will develop your own art skills, learning from other artists' work and developing a theme study from observation drawing to finished interpretive artworks.

### **What subjects should I have already done?**

NCEA levels 1 and 2 Visual Art, otherwise discussion with HoD Art about entry into course. Students opting for Design must come from a design or graphics background.

### **Where does this subject lead?**

Because this can be a double subject it is usually taken by students intending to study Art at a higher level at a Polytechnic or University. As a single subject Painting, Design Printmaking or Digital Photography can be of general interest to a student. Note that students can offer a maximum of one Art subject at level 4 (scholarship).

### **How is the course assessed?**

This course is assessed throughout the year, using NCEA level 3 internal standards and a final assessment is made on the submission of a folio showing work from your selected areas of study. Time management is an important factor – the folio must be completed by the start of Term 4.

### **\*ALL ART COURSES:**

Students will be expected to purchase and maintain their own art materials to supplement those supplied in the Art Room. Looking at the work of artists and designers is an important feature of studying Art at NCEA level 3. As well as undergoing field trips, students are expected to visit exhibitions and galleries in Wellington in their own time.

# WORKSHOP TECHNOLOGY

## **What special skills do I acquire?**

Workshop Technology is a practical subject that focuses on the activities of designing, making and evaluating projects using a range of materials, tools and processes.

**Year 11 NCEA Level 1**

**Year 12 NCEA Level 2**

**Year 13 NCEA Level 3**

The unit standards being used are those of the Furniture Industry Training Organisation (FITO)

## **What is this subject about?**

This is a practical workshop based course. Students will gain workshop skills through the use of tools and materials to make a project. Projects are designed, made and evaluated to a brief. Emphasis is placed on design, drawings, problem solving, hand skills, craftsmanship, finishing and evaluation of finished work.

## **How will I learn?**

You will make practical workshop projects in materials (wood, metal, plastic, glass etc.) using processes (marking out, cutting, machining, metal casting, finishing etc.) to achieve a final product. A folio of design work and related studies will also be kept.

## **Where will this subject lead?**

This is a practical, broad based subject that will give you some generic skills which will be useful in life. It can lead to tertiary training in Design and Technology areas or give skills directly useful in industry.

## **How is this course assessed?**

This is internally assessed using Unit Standards and some achievement standards. All completed Drawings, Related Studies and Practical Project work will be assessed against the relevant standards.

**Cost:** There will be a materials charge. Students will take home two or three projects.

# COURSE STRUCTURES (IB DIPLOMA)

## INTERNATIONAL BACCALAUREATE COURSE DESIGN

The IB diploma subjects are offered at two levels, standard level (SL) and higher level (HL). Each course is 150 hours and 240 hours of study respectively. All students must study three SL and three HL subjects chosen from each of the six groups with the exception of group 6 which can be omitted allowing two choices from either of the groups 2, and 3. The table below outlines the subjects available:

Group 1	Group 2	Group 3	Group 4	Group 5	Group 6
Language A1	Second Language	Individuals & Societies		Mathematics	The Arts
English	French	Economics	Biology	Mathematics (HL)	Music
	Japanese	Geography	Chemistry	Mathematics (SL)	Theatre Studies
	Spanish ( <i>Ab Initio</i> ) (SL only)	History	Physics	Maths Studies (SL) <i>*Refer course outline page 37</i>	Visual Arts
		Business Management			

Some examples of choices taken by current students are:

Student A – Language & Humanities Focus

Higher Level	Standard Level
English	Mathematics
French	Chemistry
History	Physics

Student B – Science & Mathematics Focus

Higher Level	Standard Level
Mathematics	Business & management
Chemistry	Spanish ( <i>Ab initio</i> )
Physics	English

## IB SUBJECTS AND PRE-REQUISITES

(AVAILABILITY SUBJECT TO MINIMUM CLASS NUMBERS)

### GROUP 1: MOTHER LANGUAGE

ENGLISH A1 (HIGHER OR STANDARD LEVEL)

#### Course Description

This is a literature-based course in which students study both regionally or locally selected pieces and world literature. A wide variety of literary genres are studied including poetry, short stories, drama and prose fiction.

#### Assessment

Internal: 30% – Oral. External: 70% – World Literature Assignment and written examination

#### Pre-requisites

Students will require mainly merit and excellence grades at Level 1 English.

### GROUP 2: LEARNED LANGUAGE

FRENCH (HIGHER LEVEL OR STANDARD LEVEL)

#### Course Description

This course focuses on language acquisition and development in the four language skills: listening, speaking, reading and writing. The syllabus comprises three parts: language, text and cultural awareness and gives students the opportunity to reach a high degree of competence in the language and explore its culture. Students develop an ability to interact and communicate clearly and effectively in a range of situations, to express their opinions on a variety of subjects and to understand and use a range of vocabulary. Students read a range of literary and nonliterary texts and learn to write in a range of formats.

#### Assessment

Internal: 30% – Interactive and individual oral, External: 70% – Written examination (text handling and written production)

#### Pre-requisites

18 credits in Level 1 French with merit grades in three Achievement Standards for standard level and excellence grades in three Achievement Standards for higher level.

## JAPANESE (HIGHER LEVEL OR STANDARD LEVEL)

### Course Description

This course focuses on language acquisition and development in the four language skills: listening, speaking, reading and writing. The syllabus comprises three parts: language, text and cultural awareness and gives students the opportunity to reach a high degree of competence in the language and explore its culture. Students develop an ability to interact and communicate clearly and effectively in a range of situations, to express their opinions on a variety of subjects and to understand and use a range of vocabulary. Students read a range of literary and nonliterary texts and learn to write in a range of formats.

### Assessment

Internal: 30% – Interactive and individual oral, External: 70% – Written examination (text handling and written production)

### Pre-requisites

18 credits in Level 1 Japanese with merit grades in three Achievement Standards for standard level and excellence grades in three Achievement Standards for higher level.

## SPANISH AB INITIO (STANDARD LEVEL ONLY)

### Course Description

The main focus of this two-year course is the acquisition of language required in everyday social interaction. The students develop a variety of linguistic skills and a basic awareness of the cultures of the countries where Spanish is spoken. Students learn how to use Spanish in a variety of practical situations (e.g. school, home, travel, work, leisure, emergency situations).

### Assessment

Internal: 30% – Interactive and individual oral, External: 70% – Written examination (Text handling and Written production)

### Pre-requisites

This course is for students who do not have previous experience in learning Spanish.

## GROUP 3: INDIVIDUALS AND SOCIETIES

### BUSINESS AND MANAGEMENT (HIGHER OR STANDARD LEVEL)

#### Course Description

Individuals belong to organisations such as sole traders, partnerships, companies, clubs and non-profit organisations. This course examines organisational structure relating to principles of delegation, power and responsibility along with theories of leadership, motivation and communication. Analytical techniques used by businesses to make decisions, including improving profitability, producing or out-sourcing production and expanding or relocating, are covered. Marketing strategies to produce the right product, in the right place, at the right time, are discussed.

#### Assessment

Internal: 25% (HL), 20% (SL) – Guided coursework (written assignment) External: 75% (HL), 80% (SL) – Written examination

#### Pre-requisites

Minimum of 18 Level 1 English credits with Merit grades in two externals. This course caters for students who anticipate a business career or have an entrepreneurial focus.

### ECONOMICS (HIGHER OR STANDARD LEVEL)

#### Course Description

This course is aimed at students who wish to understand more about the New Zealand and World economies. It prepares students for further study of social sciences or business and gives them a personal understanding of the economic environment in which they live.

Traditional economic theory of demand and supply is taught and applied to a range of current economic situations. We investigate inflation, unemployment, economic growth and development issues, international trade and exchange rates. Destruction of the environment, pollution as a result of production and reduction of poverty in the less developed nations are interesting issues covered from an economic perspective. The higher level course includes a study of the theory of how firms make decisions, which involves using graphical analysis.

#### Assessment

Internal: 20% (HL), 25% (SL) – Guided coursework (written portfolio) External: 80% (HL), 75% (SL) – Written examination

### **Pre-requisites**

1. Minimum of 20 credits at Level 1 Economics with at least 60% of credits at merit level
2. Those who have not taken Economics before: minimum of 18 credits in Level 1 English with merit grades in two externals and 18 credits in Mathematics Level 1

## **GEOGRAPHY (HIGHER OR STANDARD LEVEL)**

### **Course Description**

Geography is the interpretation and analysis of the planet Earth as the natural habitat of people. It places special emphasis on the spatial relationship between humans and the physical or natural environment. It is a particularly important subject in our modern world of globalization and pressure on resources and cultures. It develops a number of practical skills whilst fostering international understanding and respect.

The course enables students to shape informed judgements about a wide range of contemporary issues such as population, disparities in wealth and development, patterns in environmental quality, sustainability and resource consumption. Studies also include urban environments, extreme environments and the geography of food and health. An extension topic of global interactions is covered by the higher level students.

The ability to view issues from a wider perspective is appropriate for working in many different career paths. The nature of peoples' working lives is changing and making it less likely that someone will spend all their life in one company or organisation. If your career path is to be varied you will need to develop transferable skills and be flexible. Geography fosters these qualities and provides a firm base for life long learning.

### **Assessment**

Internal: 20% (HL), 25% (SL) – Fieldwork (HL), Coursework (SL) External: 80% (HL), 75% (SL) – Written examination

### **Pre-requisites**

18 Achievement Standard credits in Level 1 Geography or 18 credits in English for students new to Geography.

## **HISTORY (HIGHER OR STANDARD LEVEL)**

### **Course Description**

This course provides students with the opportunity to study individuals and societies in a range of historical contexts through exploring political, economic and social issues and developments.

During this course, students investigate a variety of sources, some of which may be of a contentious nature. Students gain an understanding of why the work of historians differs over time and in different parts of the world. Students also reflect on the role of the historian and the role of bias in the selection and interpretation of material.

### **Assessment**

Internal: 20% (HL), 25% (SL) – Historical investigation External: 80% (HL), 75% (SL) – Written examination

### **Pre-requisites**

16 credits in Level 1 History or 18 credits in English for a student new to History.

## **GROUP 4: EXPERIMENTAL SCIENCES**

### **BIOLOGY (HIGHER OR STANDARD LEVEL)**

#### **Course Description**

The following topics are covered in this course: cells, the chemistry of life, genetics, ecology and evolution, human health and physiology, further biochemistry, human reproduction, defence against disease, nerves, muscles and excretion, plant science and two additional option topics.

#### **Assessment**

Internal: 24 % – Practical work, External: 76% – Written examinations

#### **Pre-requisites**

It is strongly recommended that students wishing to take IB Biology take the Year 11 NCEA Biology course with preferably a minimum of 2 merit grades.

### **CHEMISTRY (HIGHER OR STANDARD LEVEL)**

#### **Course Description**

Chemistry is the study of matter. It involves the behaviour of materials and what happens when substances react to form new substances.

This course covers: quantitative chemistry, atomic structure and bonding, states of matter, energy in reactions, rates, organic chemistry, equilibrium, acid/base chemistry, oxidation and reduction, periodicity, human biochemistry, and drugs and medicines.

**Assessment**

Internal: 24% – Practical work External: 76% – Written examinations

**Pre-requisites**

It is strongly recommended that students wishing to take IB Chemistry take the Y11 NCEA Chemistry course with preferably a minimum of 2 merit grades.

**PHYSICS (HIGHER OR STANDARD LEVEL)****Course Description**

The course will provide opportunities for scientific study and creativity. It will allow students to develop experimental and investigative skills along with a body of scientific knowledge and techniques and an awareness of what characterises science.

Many areas of physics are covered, including: motion, forces, waves, thermal physics, electrical, magnetic and electromagnetic induction and nuclear physics. There are also options to study biomedical physics, optics, relativity and the history and development of physics.

**Assessment**

Internal: 24 % – Practical work, External: 76% – Written examinations

**Pre-requisites**

It is strongly recommended that students wishing to take IB Physics take the Year 11 NCEA Physics course and gain 22 credits with preferably a minimum of 3 merit grades.

## GROUP 5: MATHEMATICS

**MATHEMATICS (HIGHER LEVEL)****Course Description**

This course is aimed at students with a high competence and strong interest in mathematics. The majority of these students would expect to include mathematics as a major component of their university studies, especially within courses such as engineering, physics or technology.

Topics include: algebra, calculus, probability and statistics, trigonometry, graphs and geometry. Extensive use of graphic calculators is required.

**Assessment**

Internal: 20% – Portfolio, External: 80% – Written examination

**Pre-requisites**

Students will require all merit and excellence grades in Level 1 Mathematics

**MATHEMATICS (STANDARD LEVEL)****Course Description**

The course focuses on introducing important mathematical concepts through the development of mathematical techniques and caters for students who will expect to need a sound mathematical background as they prepare for future studies in areas such as chemistry, economics, psychology and business.

Topics include: algebra, functions, equations, trigonometry, calculus, statistics and probability, vectors and matrices.

**Assessment**

Internal: 20% – Portfolio, External: 80% – Written examination

**Pre-requisites**

18 Level 1 credits and merit grades in two externals. Achieved grades or better in AS 1.1 and 1.2

**MATHEMATICAL STUDIES (STANDARD LEVEL) – SUBJECT TO DEMAND****Course Description**

This course is designed to build confidence and encourage an appreciation of mathematics in students who do not anticipate a need for mathematics in their future studies.

Topics include: introduction to the graphic display calculator, number and algebra, sets, logic, probability, functions, geometry, trigonometry, statistics, financial mathematics and introductory differential calculus.

**Assessment**

Internal: 20 % – Project, External: 80% – Written examination

**Pre-requisites**

15 credits in Level 1 Mathematics

## GROUP 6: THE ARTS

### MUSIC (HIGHER LEVEL)

#### Course Description

This course enables students to develop their musical skills through solo performance and composition, to develop their perceptual skills in response to a wide variety of music (classical, jazz and crossover styles) and to explore the diversity of music throughout the world. Students also undertake a 2000-word investigation into a topic of their choice. It suits those who wish to pursue a career or further study in music.

#### Assessment

Internal: 50% – Solo performance, composition External: 50% – Listening examination, musical investigation

#### Pre-requisites

20 credits in Level 1 Music with excellence grades in two Achievement Standards. Students must have individual instrumental or vocal tuition throughout the two-year IB course. Students should be at Grade 6 Performance and Grade 5 Theory.

### MUSIC (STANDARD LEVEL) SOLO OR GROUP

#### Course Description

This course enables students to develop their musical skills through solo or group performance, to develop their perceptual skills in response to a wide variety of music (classical, jazz and crossover styles) and to explore the diversity of music throughout the world. Students also undertake a 2000-word investigation into a topic of their choice. This course assists students in developing their potential as a musician, both personally and collaboratively.

#### Assessment

Internal: 50% – Solo performance or Group performance External: 50% – Listening examination, musical investigation.

#### Pre-requisites

17 credits in Level 1 music with merit grades in at least two achievement standards. Students should be having instrumental or vocal lessons. Students should be at approximately Grade 3 Theory standard.

### THEATRE STUDIES (HIGHER OR STANDARD LEVEL)

#### Course Description

This course develops students' practical and theoretical engagement in theatre. Students over the two year programme will create and develop performance skills. Observe theatre to develop critical analysis and reflective practices, explore a range of theatre traditions and cultural practices around the world in a theoretical context.

#### Assessment

Internal 50% (Production Oral Presentation, Independent portfolio) External 50% (Practical Performance Proposal, Research Investigation)

#### Pre-requisites

Level 1 NCEA Drama

### VISUAL ARTS (HIGHER LEVEL AND STANDARD LEVEL)

#### Course Description

There are a number of options within the standard level and higher level courses but for whichever option a student chooses there are two compulsory parts: Studio work (practical exploration and artistic production) and Investigation workbooks (independent critical research and analysis, visual and written, in more than one culture).

The studio work criteria reward the pursuit of projects in a variety of media, the development of original ideas, the discovery of creative solutions and the acquisition of technical skills.

Work of quality which shows a maturity of artistic understanding at the end of the course is preferable to work which shows a superficial acquaintance with a large number of materials.

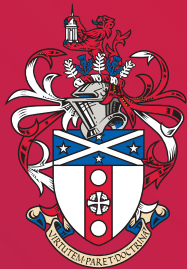
#### Assessment

Internal: 40% – Studio work and research workbooks External: 60% – Studio work, exhibition, oral discussion, research workbooks

NB: All candidates complete a Record booklet as part of moderation. It includes: a personal statement, photographs of studio work and photocopied workbook pages

#### Pre-requisites

NCEA Level 1 external portfolio pass



Est. 1916

## SCOTS COLLEGE

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