

PIOPIO COLLEGE

Course Information

Year 13



This booklet has been put together to help you decide which courses to take in Y13.
It contains an outline of each of the subjects we hope to offer in 2006.

If there are subjects you would like to take that are not shown in this booklet,
please discuss your ideas with Mr Day.

You can get help with your subject choices for next year from your vertical form teacher,
subject teachers, the Careers Adviser (Mr Burnell), and Mr Day.

Subject List Y9 - Y13

Core subjects •

Optional subjects ○

	Code	Subject	Y9	Y10	Y11	Y12	Y13
Languages	ENG	English	•	•	•	•	○
	ENP	English (Practical)			•	•	
	FRE	French	○	○	○	○	○
	MAO	Te Reo Māori / Te Reo Rangatira	○	○	○	○	○
Mathematics	MAA	Maths with Applications				•	
	MAC	Maths with Calculus					○
	MAS	Statistics and Modelling					○
	MAT	Mathematics	•	•	•	•	
	MAW	Mathematics (Waikato Certificate)			•		
Science	AGF	Agriculture and Forestry				•	•
	AGR	Agriculture			○		
	AGH	Agriculture and Horticulture		○			○
	AGS	Agricultural Science				○	
	BIO	Biology				○	○
	CHE	Chemistry				○	○
	PHY	Physics				○	○
	SCI	Science	•	•	•		
Social Science	GEO	Geography			○	○	○
	HIS	History			○	○	○
	SST	Social Studies	•	•			
	TIK	Tikanga-a-iwi	•				

	Code	Subject	Y9	Y10	Y11	Y12	Y13
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Technology	CAR	Carpentry					
	DTE	Design and Technology	•	○			
	FFT	Food & Fabric Technology	•	○			
	FPR	Food Preparation (City & Guilds)				❖	
	GRA	Graphics	•	○	○		
	HEC	Home Economics			○		
	THM	Technology - Hard materials			○	○	
	TSM	Technology - Soft Materials			○	○	

Arts	ART	Art	•	○			
	ART	Visual Arts (Level 1)			○		
	MUS	Music	•				
	PAI	Painting (Visual Arts Level 2 and 3)				○	○
	PHO	Photography				○	○
	PRI	Print Making (Visual Arts Level 3)					○
	SCU	Sculpture (Visual Arts Level 3)					○

Business and Computing	ACC	Accounting			○	○	○
	BAC	Business Administration & Computing				○	○
	CNC	Computing (National Certificate)				○	○
	ECO	Economics	•		○	○	○
	INM	Information Management		○	○		

PE and Health	HEA	Health	•	•	•		
	PED	Physical Education (advanced)				○	○
	PED	Physical Education	•	•	•		

SOME BASIC INFORMATION TO GET YOU STARTED

NCEA Level 3 is the main qualification for Y13 students.

Students in Y11 are usually working towards NCEA Level 1
Students in Y12 are usually working towards NCEA Level 2

National standards have been set in each area of learning.
There are two types of standards, Achievement Standards and Unit Standards.
When students achieve these standards they earn credits toward their NCEA qualifications.

If you did not gain the 80 credits needed for Level 2 last year, any credits you gain this year count towards completing Level 2. The credits also count for your Level 3.

The National Certificate of Educational Achievement (Level 3)

is awarded to students who gain at least 80 credits;

60 credits must be at Level 3 or higher.
The remaining 20 credits may be from level 2 or higher and may include Level 2 credits gained last year.

There are no compulsory subjects at Level 3.
If you planning to go to university in 2007, you must make sure that you will meet the minimum requirements for University Entrance. (see page 9 for details)

Entry Fees

Entry fees in 2005 were \$75.00

The College collects the fees on behalf of NZQA.
They must be paid in full by the end of Term 2.

Financial assistance may be available for families, if they are in one of these situations

- receive a Social Welfare benefit
- income entitles them to a Community Services Card
- have 2 or more students entering for secondary school qualifications in the same year

COURSE PATHWAYS

As a Y13 student you will follow one of three pathways.

- ❖ RURAL STUDIES PROGRAMME
- ❖ PRE-EMPLOYMENT COURSE (including a GATEWAY placement)
- ❖ NCEA LEVEL 3 COURSE

RURAL STUDIES PROGRAMME

Piopio College is an NZQA accredited secondary school. It has owned and operated its own farm since 1994. The Board of Trustees owns a house and garage on a section on the farm boundary. This is the base and classroom for the Piopio College Rural Studies Programme.

Who is this Course for?

This course is for students 16–18 years of age. We are looking for students who have a good attitude, are hard-working and are enthusiastic about rural work.

About the Course

This is a full year course where attitude and attendance will be monitored closely.

The course includes

Industry knowledge	Workplace safety
Core skills	Industry breadth
Machinery maintenance	Driving ATV & Tractor
Fencing & wire skills	Stock handling skills
Chainsaw safety	Shearing
Career development	

What is different about this course?

The Rural Studies Programme is designed to give students a wide experience of the rural sector. This is possible because of the interest, goodwill and cooperation of a large number of varied rural enterprises, from drainage contracting to fertiliser and farm retail to crutching.

What qualifications are available?

During the year you will do NZQA unit standards in agriculture, forestry or horticulture. These lead to Level 2 National Certificates in these areas of study. During the year you will also have the opportunity to visit other training organisations to look at the further training and study that is available

Costs?

The course is free but there may be some costs associated with clothing such as wet weather gear and steel capped boots. One week of the course is spent at Taratahi Agricultural Training Centre. This costs approximately \$150.

Job opportunities after the course?

There are many job opportunities available in the rural sector and to a large extent the only limitation is attitude. We set high expectations and help our students to achieve.

See Mr Davies-Colley or Mrs Jenkins for more information about Rural Studies.

PRE-EMPLOYMENT COURSE

This is a new initiative for 2006. It will be a class that defines its objectives and its focus on preparing students for the workforce or tertiary courses from July 2006. (ie some students may aim to enrol in courses for the second semester 2006 or to earn a job during the year).

This course aims to meet the needs of students:

- who may find difficulty in meeting the Level 2 standards across the curriculum,
- or who have not gained Level 1 yet and wish to do so,
- or who have of recent times lacked motivation to achieve at school but are not yet ready to attend a tertiary course or join the workforce.

Features of the Pre-employment Course

- 1 Each student would choose 2 subjects from the option structure. Their remaining subjects would be negotiated from the list below on an individual basis. The Maths and English programme will be the current alternative programme but students would have the opportunity to complete selected topics from the academic Maths/English programme
- 2 Each student would have an I.E.P. (Individual Education Plan) negotiated between the school and the student based on their individual career aspirations.
- 3 Each student would have a community mentor
- 4 Each student would be required to complete a set number of community service hours.
- 5 Class will be set up as much as possible to mirror real world employment conditions ie dress, attendance, behaviour, work ethic. Relationships with others.
- 6 Programmes would be value rich, promoting leadership opportunities and training, life skill
- 7 Gateway and ASDAN students would best fit in this class.

Programme

Maths The current L1 Alternative Maths programme as a core
English The current L1 Alternative English programme as a core.

Life Skills A mixture of Careers and Life Skills

Plan over future direction	US 10780	2 credits	Level 1
Work Experience	US 10781	2 credits	Level 1
Face to Face Interview	US 1293	2 credits	Level 1
Support Services / Resources in Community	US 1827	2 credits	Level 1
Teamwork	US 3503	2 credits	Level 1
Care and Timelines as an employee	US 424	3 credits	Level 1
Job search skills		3 credits	Level 2
Health & Safety in Workplace		1 credit	Level 1
Produce a C.V.		2 credits	Level 1
Discrimination / Health Rights		2 credits	Level 1
Starting a job for first time		3 credits	Level 1
Problem Solving		2 credits	Level 2
Explore career options relevant to an area of learning and explore their implications for oneself		2 Credits	Level 2
Manage own learning programme		3 Credits	Level 2

Manage personal wellness	2 Credits	Level 1
Examine friendships and explain strategies for managing friendships	2 Credits	Level 1
Demonstrate strategies to manage interpersonal conflict	2 credits	Level 1
Develop, describe, implement and evaluate a plan of action to enhance hauora/well-being (Health Promotion)	5 Credits	Level 1
Demonstrate understanding of disappointment, loss and grief.	2 Credits	Level 1

Money management

Simple vehicle management

Preparing for job seeking and interview techniques

Coping with conflict using communication skills

Aspects from the old sport unit that worked i.e. coaching certs.

Students would be expected to qualify as coaches in at least 2 sports and hopefully Athletics.

GATEWAY

Piopia College runs a Gateway programme. Gateway offers students an opportunity to experience workplaces first hand while engaging in structured workplace learning. Students have been placed in over 50 industries and hundreds of businesses around New Zealand.

Gateway helps to make learning relevant and to broaden students' options by offering them both traditional and workplace learning.

Students pursue individual learning programmes, which allow them to gain new skills and knowledge in a workplace in their local community. The learning is hands-on and practical. Students will be assessed in the workplace for unit and achievement standards which contribute to the National Certificate of Educational Achievement (NCEA), as well as industry specific qualifications.

The work placements can be very flexible to allow timetables to be managed for students, employers and the school. Possible options that have worked in other schools include: holidays, weekends, after school all year, 1 day per week. Students are currently working in a wide variety of industries, the most popular Gateway options to date have been; hospitality, automotive, retail, tourism, engineering and building.

See Mr Burnell or Mrs L Rauputu for more information about the Pre-employment course and Gateway.

MOTIVATED HORIZONS

This is a Piopio College initiative designed to expand the career, qualifications and life outlook for our students.

Whakaara kia Mataara (Reaching for the Greatest Heights)

Piopio College wants to offer greater support to our Year 13 students before they leave school. The support will be in the form of inspirational and motivational presentations from local entrepreneurs and business people and academic mentoring / coaching. This support will be on-going throughout the year. All Year 13 students going on to further study will also be eligible for scholarships / prizes at the end of the year. The eligibility criteria for this money are yet to be determined, but are likely to include

- Good attitude.
- Incident free year
- Solid academic performance
- Service to the school and community
- Good attendance



If you would like more information about Motivated Horizons, please speak to Mr Davies-Colley.

UNIVERSITY ENTRANCE STANDARD

A person shall be qualified for entrance to a university in New Zealand if he/she has obtained:

- a minimum of 42 credits at level 3 or higher on the National Qualifications Framework, including a minimum of 14 credits at level 3 or higher in each of two subjects from an approved subject list, with a further 14 credits at level 3 or higher taken from no more than two additional domains on the National Qualifications Framework or approved subjects
- a minimum of 14 credits at level 1 or higher in Mathematics or Pangarau on the National Qualifications Framework
- a minimum of 8 credits at level 2 or higher in English or Te Reo Maori; 4 credits must be in Reading and 4 credits must be in Writing.



14 credits in Mathematics at level one or higher
4 credits at level two or above in Reading
4 credits at level two or above in Writing

It's important to remember that these are the minimum requirements for entry.

Each university has specific entry requirements for each course.

Check with Mr Burnell early in the year, so you can be certain that you are taking the right combination of Y13 subjects to gain entry to your chosen course in 2007.

NCEA LEVEL 3 COURSE

- ❖ 5 subjects chosen from the option structure.

Earlier this year, you completed a survey about your possible subject choices for 2006. We have used your replies to build the option structure for 2006.

The subjects are arranged in six groups. You take one subject from each of 5 groups.

Year 13 Option choices

GROUP A

- Biology
- Y12 Recreation and Health

GROUP B

- Statistics and Modelling
- Y12 Maths

GROUP C

- English
- Y12 English (Unit Standards)
- Y12 Carpentry

GROUP D

- Physical Education (advanced)

GROUP E

- Computing
- Design / Painting / Printmaking
- Physics

GROUP F

- Agriculture and Forestry
- Chemistry
- Y12 Food Preparation
- Photography
- Technology Soft Materials

Other subjects such as Accounting, Economics, French, Geography, Graphics, History etc. may be added to this structure if there is sufficient student interest.

See Mr Day or subject teachers if you want more information.

Y13 COURSE DETAILS (courses arranged in alphabetical order)

ACCOUNTING

This course will be taught by the Correspondence School

You will process financial information and report financial information for partnerships and companies.

AS	Name	Credits	Internal or External
3.1	Describe and apply the conceptual basis of accounting in context for business entities	4	Ext
3.2	Process financial information for partnerships and/or companies	3	Ext
3.3	Process financial information for a manufacturing job-cost subsystem	3	Ext
3.4	Report financial information for partnerships and/or companies	6	Ext
3.5	Prepare a report which analyses and interprets a company's financial report for external users	5	Int
3.6	Explain and prepare information for management decision-making	3	Ext

You are provided with a suitable programme of learning based on your needs and goals. Programme materials are mainly based on booklets, but enhanced by any of the following: videos, tapes, CDs, CD-ROMs, online resources and discussions. Communication between the teacher and you and between you and other students may be conducted via phone, videoconferencing or online technologies such as discussion groups or email.

Previous steps

NCEA Level 2 Accounting

AGRICULTURE / FORESTRY (STAR)

Delivered in partnership with Taratahi Agriculture Training Centre, Masterton, units go towards the National Certificate in Agriculture. This is a year long course, comprising 7 'core' unit standards about soil, pasture, health and safety, animal physiology and agri-chemicals. Students can select additional units. Forestry Unit Standards can also be taken, including units on propagation, tree health and planting.

Two four day courses will be held at Piopio College: one on chainsaws and one that will allow students to complete units about motorbike safety, driving wheel tractors and handling stock.

A four day block course at the beginning of the Year 12 school year will be held at Taratahi. This will cost students \$120.00 as it is not funded from STAR.

There is a maximum number of 10 students for all practical courses. All interested students will need to apply for placement and demonstrate their ability to work in a practical situation with other people.

BIOLOGY

The following Standards are offered in 2006

Internal assessments

Standard	Topic	Credits
AS 90713	Carry out a practical investigation with guidance into an aspect of the ecological niche of an organism	4
AS 90714	Research a contemporary issue in biology	3
AS 90718	Describe applications of biotechnological techniques	3

External assessments

Standard	Topic	Credits
AS 90715	Describe the role of DNA in relation to gene expression	4
AS 90716	Describe animal behaviour and plant responses in relation to environmental factors	4
AS 90717	Describe processes and patterns of evolution	3
AS 90719	Describe trends in human evolution	3

Equipment requirements

Refer to the Year 11 - 13 Science Student's Handbook.

Costs refer to the Science Student's Handbook.

Y12 Biology Course Manual.

Field trip.

Entry requirements refer to the Science Student's Handbook.

Generally, the minimum requirement is 50% of the credits in NCEA L2 Biology.

Please make a point of speaking to Mr Mattisson if you have any queries regarding L3 Biology.

CARPENTRY (STAR)

This course includes modules from the Building and Construction Industry Training Organisation.

With the very high demand for people to enter these careers, this course will teach the basics of carpentry and building construction. It includes theory lessons and practical work. Students will have the opportunity to sit BCITO Carpentry Unit Standards, so gaining some industry qualifications while still at school.

CHEMISTRY

The following Standards are offered in 2006 if **there is sufficient demand from students**

Internal assessments

Standard	Topic	Credits
AS 90694	Carry out an extended practical investigation involving quantitative analysis	4
AS 90695	Determine the concentration of an oxidant or reductant by titration	2

External assessments

Standard	Topic	Credits
AS 90696	Describe oxidation-reduction reactions and characteristics of galvanic cells	3
AS 90698	Describe principles of organic chemistry	4
AS 90700	Describe properties of aqueous systems	5
AS 90780	Describe properties of particles and thermo-chemical principles	5

Equipment requirements

Refer to the Year 11 - 13 Science Student's Handbook.

Costs refer to the Science Student's Handbook.

Y12 Chemistry Course Manual.

Field trip.

Entry requirements refer to the Science Student's Handbook.

Generally, the minimum requirement is 50% of the credits in NCEA L2 Chemistry.

Please make a point of speaking to Mr Mattisson if you have any queries regarding L3 Chemistry.

BUSINESS ADMINISTRATION & COMPUTING (NATIONAL CERTIFICATE LEVEL 2)

This Certificate has been introduced as an alternative to Sixth Form Certificate Typing and Y13 Typing, and is to be delivered alongside the National Certificates in Computing (Levels 2 & 3) already in place. Students, however, may aim to be credited with both Certificates since some of the Unit Standards can be cross-credited.

The Unit Standards listed under Business Administration Processing and Generic Computing below are those already accredited for Piopio College with the New Zealand Qualifications Authority. They are all listed to provide an indication only of those extra Unit Standards that can be used to make up the required balance of credits after the necessary minimum has been achieved.

The National Certificate in Business Administration and Computing (Level 2) will be awarded to students credited with a minimum of 60 credits, of which 40 are at level 2 or above, and which meet the requirements of the compulsory and elective sections.

Unit Number & Title	Credits
Occupational Health and Safety - (Compulsory Unit)	
497 Protect health and safety in the workplace	1
Business Administration Services (Minimum 10 credits)	
327 Document business transactions	3
329 Process financial information for cash transactions	3
121 Operate clerical systems and apply business procedures	5
Business Administration Processing (Minimum 10 credits)	
101 Use keyboarding skills to enter text	3
102 Consolidate keyboarding skills and develop keyboarding speed and accuracy	3
107 Produce text processed communications	5
108 Produce text processed commercial documents	5
111 Operate a wordprocessor	5
112 Apply wordprocessing functions	5
12883 Enter and manage text for generic text and information management	3
12884 Create documents and manage files for generic text and information management	3
12885 Create and enhance documents combining text and images for generic TIM	6
12886 Customise software features to manipulate text for generic TIM	6
12887 Integrate text and images and refine file management for generic TIM	6

Generic Computing (Minimum 9 credits)

2780	Operate a personal computer	6
2781	Manage computer data	3
2782	Use personal computer operating system	3
2784	Produce and use computer spreadsheets using base functions	3
2786	Create and use a computer flatfile database using base functions	3
2788	Produce desktop published documents using base functions	3
2790	Describe and operate personal computer peripherals	3
2791	Integrate data from word processor, spreadsheet and database files	3
2798	Describe the application and impact of computer technology on society	3
2785	Produce and use computer spreadsheets for business use	5
2787	Create and use a computer flatfile database for business use	5
2789	Produce desktop published documents for business use	5
2797	Demonstrate a knowledge of computer networks	5
5940	Produce a presentation using desktop presentation computer application	5
5950	Investigate the use of computer technology in an organisation	6

Interpersonal Communications (Minimum 5 credits)

1277	Communication information in a specified workplace	3
9677	Participate in groups and/or teams to gather ideas and information	3

Service Sector - Core Skills (Minimum 4 credits)

62	Maintain personal presentation in the workplace	2
64	Perform calculations for the workplace	2

Assessment Methods

Tests (Practical and Theory)
Assignments (Written and Practical)
Observation

Course Materials

1 A4 sized ring binder
Writing equipment and refill paper

Course Fee:

\$30

Prerequisites:

Completion of the Year 11 Text & Information Management course.
However, other students would not be excluded, but should seek permission and/or advice from a computing teacher.

COMPUTING (NATIONAL CERTIFICATE LEVEL 3)

This certificate follows on from the Level 2 certificate. It is designed for students wishing to further develop their computer skills. This programme is a qualification of national standing, requiring the maintenance of a minimum standard throughout the country.

Fifty-two credits are required for certification, twelve credits are the compulsory units (2780 and 2781, see NCC Level 2), and twenty credits are from a computing sub field, of which at least 30 credits must be either compulsory or optional computing units. The compulsory and optional Level 3 computing units that will be offered during the 2005 school year are listed below:

Unit Number & Title

2780	Operate and maintain a personal computer system	9
2781	Manage and protect data in a personal computer system	3
2785	Produce and use Computer Spreadsheets for Business Use	5
2787	Create and use a Computer Flatfile Database for Business Use	5
2789	Produce Desktop Published Documents for Business Use	5
5950	Investigate the use of computer technology in an organisation	6
5940	Produce a presentation	5
2797	Demonstrate a Knowledge of Computer Networks	5

Total Credits: 43

112	Produce information using Word Processing Functions	5
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The remaining 4 credits can be made up from any Level 3 domain on the National Framework.

Assessment Methods

Preparatory practical exercises and written theory notes

Assignments (Written and Practical)

Observation

Final Assessment to achieve the Unit Standard (Practical, Written and Observation)

Course Materials

1 A4 lever arch file

Course Fee

\$15

Pre-requisites

Achievement of the National Certificate in Computing Level 2 or consultation with the Computing Teacher. However it will be recommended that the student should first complete Unit Standards 111, 2784, 2786, and 2788 before electing to do this Certificate.

ECONOMICS

This course will be taught by Piopio College and video-conference.

NCEA Level 3 Economics has three main sections of study. The first section is about resource allocation via the market system where you will look closely at the concepts of demand and supply, market analysis and market structures. The second section, allocation via the public sector, enables you to understand the role of government in providing goods and services in the economy. The third section looks at the New Zealand economy as a whole, its output, its monetary system and its relationship with the rest of the world.

Section A, Resource allocation via the market system, covers:

- demand and supply
- market equilibrium and structures
- demand and supply curves
- shifts in curves, elasticity
- market equilibrium
- monopoly
- perfect competition
- profit maximisation.

Section B, Allocation via the public sector, covers:

- intervention
- externalities
- natural monopolies
- public goods
- merit and demerit goods
- equity.

Section C, Macroeconomic approach to the economy, covers:

- real and nominal GDP
- national accounts
- money and credit
- Reserve Bank
- money supply
- balance of payments
- aggregate demand and supply.

AS	Name	Credits	Internal or External
3.1	Understand the concepts of demand and supply	5	Ext
3.2	Describe and illustrate the market and allocative efficiency	4	Ext
3.3	Describe and illustrate resource allocation via the public sector	4	Ext
3.4	Describe and illustrate aggregate economic activity	6	Ext
3.5	Carry out a study of different viewpoints of government involvement in an economic issue	2	Int
3.6	Carry out an economic investigation to test a hypothesis	3	Int

Previous Study

NCEA Level 2 Economics

ENGLISH

NCEA Level 3 English

Credits	18
Internal	9
External	9

Prerequisites

Have completed an English Course at level 2.

Assessment Methods

Internal and External Achievement Standards.

Level 3 Alternative English

Credits	8+
Internal	8+
External	0

Students would focus on Level 2 and 3 Units aiming to satisfy the requirements of future employment and study.

FOOD PREPARATION AND COOKING

The course includes

- City and Guilds International Certificate in Food Preparation and Cooking
- NZQA L2 Restaurant Service Unit Standards
- NZQA L2 Food Safety Unit Standards

Outcomes

Students, upon successful completion of this course will gain the necessary knowledge and practical experience to operate as a front line worker in a typical kitchen environment. City and Guilds is an internationally recognised certificate and one that is recognised by catering establishments throughout NZ and the world.

The Restaurant Service course gives the student the opportunity to gain 9 L2 Unit Standards. The Food Safety course gives the student the opportunity to gain 7 L2 Unit Standards.

Course Content

The C & G course covers 19 topic areas that include Food Safety, Cooking Methods, cost control operations, food preparation and Nutrition.

The Restaurant Service course provides the student with the opportunity to gain experience in the catering industry. The written component is delivered at Piopio College and the practical component at Waiariki Polytechnic in Rotorua.

Assessment

Practical Food preparation and Cooking practical exam

Written Food preparation and cooking principles multi-choice exam

Cost

Students must be prepared to provide themselves with the necessary cooking ingredients.

Subject fee	\$35.00	
Practical exam fee	\$45.00) City and Guilds
Written exam fee	\$100.00) examinations

GEOGRAPHY

Geography is the study of the environment as the home of people. It looks at how humans modify and influence the environment and how nature affects humans. This course follows on from the level two geography course, however there are no pre-requisites. If you enjoyed Social Studies or Science then you should find Geography interesting.

Topics that are studied during the year include Natural processes in the Tongariro Volcanic centre, Techniques for fieldwork, Migration as a cultural process.

Year 13 Geography Assessment Programme

In geography this year you will be working towards gaining Level 3 credits for the National Certificate of Educational Achievement. The work you do throughout the year will be assessed in two different ways:

Internal assessment - assignments and activities carried out throughout the year

External assessment - an exam sat at the end of the year.

The year 13 geography programme is assessed against seven achievement standards. Each has a credit weighting. When you gain credit for an achievement standard the credits contribute to your NCEA. You can also gain different grades for each achievement standard: **Achieved the standard**, **Achieved the standard with Merit**, **Achieved the standard with Excellence**. The grade you achieve is determined by the quality of your work as measured against national standards.

Outlined below are the Level 3 geography achievement standards, the credit weighting of each and how they are assessed.

AS	Title	Credits	Internal or External
3.1	Analyse a geographic environment, focusing on the interacting natural processes	3	Ext
3.2	Analyse a cultural process	3	Ext
3.3	Analyse the role of geography in planning and decision-making	3	Ext
3.4	Select and apply skills and ideas in a geographic context	6	Ext
3.5	Carry out geographic research with consultation	3	Int
3.6	Analyse a contemporary geographic issue and evaluate courses of action	3	Int
3.7	Analyse a global geographic study	3	Int

You will be advised well in advance when each assessment will be carried out and what the assessment policies of the school and this department are.

Students to supply: Ringbinder, A4 refill, WA4 exercise book
Coloured pencils, Metric ruler

MATHEMATICS WITH CALCULUS

This course is especially suitable for students wishing to undertake further studies in areas like Physical Sciences, Engineering, and Electronics.

Students taking this course will be enrolled with the Correspondence School.

Modules include:

AS	Topic	Credits	Internal or External
3.1	Derivatives	6	Ext
3.2	Integrals	5	Ext
3.3	Differential equations	2	Int
3.4	Complex numbers	4	Ext
3.5	Graphs and Conic sections	3	Ext
3.6	Equations involving trig functions	4	Int

Assessment Methods

L3 Achievement Standards

Students must provide

Pen, pencil, ruler, refill, folder, scientific calculator.

Previous study/ Entry requirements

Y12 Maths

Good grades in L2 Maths Achievement Standards. Merit in Algebra and Calculus.

Next Step

Tertiary study

PHYSICAL EDUCATION (ADVANCED)

This advanced, academic and practical course will be further modified from previous years to accommodate the demands of NCEA level 3 assessments.

Following a revision of *Training Principles and Methods*, a full battery of tests will be conducted on 9 of the Fitness Components. Students will then plan and implement an 8 week exercise programme based on their personal definition of physical wellbeing. On completion of the programme a self review would be undertaken.

The inter-relationship between physical well being and body function is also examined in depth covering topics such as posture, flexibility, hazardous exercises. There will also be an examination of a current physical activity, event or trend that impacts on New Zealand society. In 2005 it was the link between obesity and inactivity

In the Module relating to Physical Activity the students will gain data on their current performance skill levels then plan and evaluate improvements in a skill learning programme (related to fencing). They would then demonstrate the skills learned against National Standards.

If time allows students may take action to influence the participation of others in physical activity.

Assessment Methods

Our course in 2006 will be fully Internally Assessed with an intention to target Achievement Standards PE 3.1, 3.2, 3.3, 3.4 and 3.5. This will give students the opportunity of achieving 19 credits at Level 3.

Students must provide

Foolscap file box, refill. Appropriate clothing for exercise.
Purchase the Y13 Physical Education workbook (cost approx \$25.00) by day 4 of Term 1.

Previous study/ Entry requirements

No prerequisites are required however experience and success with Level 2 NCEA (not necessarily PE) is desirable.

Next Step

Level 3 PE is an appropriate pathway leading into Tertiary courses in PE / Sport / Leisure. Apart from contributing to personal present and future lifestyles, Level 3 PE would also be of benefit in "people orientated" occupations.

PHYSICS

The following Standards will be offered in 2006 if **there is sufficient demand from students**

Internal assessments

Standard	Topic	Credits
AS 90518	Carry out a practical physics investigation with guidance that leads to a mathematical relationship	4

External assessments :

Standard	Topic	Credits
AS 90520	Demonstrate understanding of wave systems	4
AS 90521	Demonstrate understanding of mechanical systems	6
AS 90522	Demonstrate understanding of atoms, photons and nuclei	3
AS 90523	Demonstrate understanding of electrical systems	6

Equipment requirements

Refer to the Year 11 - 13 Science Student's Handbook.

Costs refer to the Science Student's Handbook.

Y12 Physics Course Manual.
Field trip.

Entry requirements refer to the Science Student's Handbook.

Generally, the minimum requirement is 50% of the credits in NCEA L2 Physics and L2 Mathematics.

Please make a point of speaking to Mr Mattisson if you have any queries regarding L3 Physics.

STATISTICS AND MODELLING

This course is suitable for students who may wish to continue further studies in subjects where statistical knowledge is helpful e.g. Business studies, Economics, Social Sciences, Biological Sciences.

Modules include

AS	Topic	Credits	Internal or External
3.1	Time Series	3	Int
3.2	Confidence Intervals	3	Ext
3.3	Probability	3	Ext
3.4	Solving equations	4	Ext
3.5	Statistics investigation	3	Int
3.6	Probability Distribution	4	Ext
3.7	Curve fitting	2	Int
3.8	Linear Programming	2	Ext

Assessment Methods

L3 Achievement Standards

Students must provide

Pen, pencil, ruler, refill/folder, scientific calculator
Statistics work book (cost \$20 through school)

Previous study/ Entry requirements

Y12 Maths
Good grades in L2 Achievement Standards

Next Step

Tertiary study

VISUAL ARTS

Students get to specialise in either Design or Printmaking or Painting.

The aim of this course of study is for students to develop an understanding of their chosen established practice and to apply and extend this knowledge within their own work.

Students will research established and contemporary practice to extend and develop a systematic approach to learning. This will take place through a range of tasks (research, drawing, annotation, sequential studies, small and finished works) and will demonstrate the development, clarification and resolution of pictorial ideas.

The following Standards will be offered:

Unit	Title	Credits	Assessment
3.1	Research and analyse approaches with established design, painting and printmaking practice	4	Internal
3.2	Investigate and use ideas and methods in the context of a drawing study in (painting, printmaking, design).	6	Internal
3.3	Produce original work within (painting, printmaking, design) to show extensive knowledge of art making methods and ideas.	14	External

Students must provide

A3 blank spiral bound journal

A3 Art wallet

A3 drawing pad

Course fee

The course material fee of \$75 covers all materials that each discipline requires, including a basic drawing kit.

Previous study/Entry requirements

16 credits in NCEA Level 2 Visual Art

Next Step

Tertiary Education

VISUAL ARTS (PHOTOGRAPHY)

The aim of study at this level is to further develop understanding of photographic procedures and practices and to apply and extend these in individual performance.

Students will use research of established practice to extend ideas and develop a systematic approach to learning in Photography. Students work towards producing an original body of work in which they generate, analyse and resolve ideas.

Assessment Methods

Unit	Title	Credits	Assessment
1.1	Research an art-making tradition and discuss its links to relevant recent photography practice.	4	Internal
1.2	Investigate and use ideas and methods in the context of a drawing study in photography.	6	Internal
1.3	Produce original work within photography to show extensive knowledge of art making methods and ideas.	14	External

Students must provide

35mm manual SLR camera
A3 blank spiral bound journal
A4 file box

Course fee

The course material fee is \$300. No refunds will be given and no printing materials or film will be supplied until payment of course fees has been arranged.

Previous study/Entry requirements

16 credits in NCEA L2 Visual Arts Photography

Next Step

Tertiary Education