

ST. JOHN'S COLLEGE HASTINGS



SENIOR OPTIONS BOOKLET 2020

INTRODUCTION

This booklet will help students make informed decisions about choosing subjects for next year.

YEAR 11 PROGRAMME

Year 11 students will study a course of seven subjects. Religious Education, English, Mathematics and a Science subject are compulsory. The other three subjects are option choices.

All Year 11 students will study towards Level 1 of the National Certificate of Educational Achievement (N.C.E.A.) To achieve Level 1 N.C.E.A., students must gain 80 credits, ten of which must be from Literacy Standards, and ten of which must be from Numeracy Standards.

Most courses offer between 20-24 credits, however alternative courses in English, Mathematics and Science are available which offer about 18 credits.

The achievement standards which carry the credits can be attained in three grades.

Achieved - which means the standard has been met

Merit - which means the standard has been achieved very well

Excellence - which means that the standard has been achieved at a very high level.

YEAR 12 PROGRAMME

Students study a Year 12 course of seven subjects. English and Religious Education are compulsory.

Most Year 12 students will study towards Level 2 of the N.C.E.A. To achieve Level 2 N.C.E.A. students must gain 80 credits, 60 of which must be at Level 2 or above (the remaining 20 could come from Level 1.)

Year 12 students that have not gained N.C.E.A. Level 1 can continue to accumulate the credits they need by studying either Level 1 or Level 2 subjects.

YEAR 13 PROGRAMME

Students study a Year 13 course of five subjects, as well as Religious Education which is compulsory.

Most Year 13 students will study towards Level 3 of the N.C.E.A. To achieve Level 3 N.C.E.A. students must gain 80 credits, 60 of which must be at Level 3 (the remaining 20 credits could come from Level 2 credits).

There is also the opportunity at Year 13 for more able students to sit a scholarship examination in some of their Level 3 subjects. These are challenging external examinations with good financial rewards.

ENTRANCE TO UNIVERSITY

In order to enroll at a New Zealand University, a student requires a formal entrance qualification from the New Zealand Qualifications Authority. The University Entrance qualification is obtained by achieving **all** of the following:

- Level 3
- 14 credits in each of **three** approved Level 3 subjects
- 10 credits in Level 1 Numeracy standards or higher
- 10 credits in Level 2 Literacy standards or higher. Five of these must be in writing and five must be in reading.

MULTILEVEL STUDY

Our timetable structure makes multilevel study possible. This means students can study a mix of subjects from Levels 1, 2 or 3.

OPTION SELECTION

This is completed on Tuesday the 16th of October and Wednesday the 17th of October 2018. Parents are encouraged to make a booking through the schoolinterviews.co.nz website. This option day will be completed with the Academic Deans Mr. Robertson (Councilor) and Mr. Ferreira (Director of Curriculum).

CAREERS PLANNING:

When planning a course of study, students should consider the following:

- Their strengths and what they enjoy doing.
- Be aware of their skills, abilities, attitudes and interests and match these with possible career options.
- Keep their subject choices open as long as possible. A career plan can often change. This needs to be balanced however with taking subjects that match possible career choices.

Mrs. Russell and Mr. Ferreira make up the careers team at St. John's College. They are available for advice about career options for all students at all levels.

A comprehensive list of careers and recommended subjects that should be studied for those careers can be found as an attachment to this booklet.

SCHOOL POLICY ON INTERNAL ASSESSMENT

This year you will study either achievement standards or unit standards in each of your subjects. Achievement standards are assessed in two ways; internally (by your teacher) or externally (by an 'outside' person which normally means sitting an external examination). All unit standards are assessed internally. Because some of the Achievement Standards and all of the Unit Standards are assessed internally, we have to have a student information sheet to inform you on key issues. These are outlined below:

Completion of Internal Standards

It is a requirement for all courses that work is completed. This means that ALL internal standards must be completed to a satisfactory level. It is important to complete the internal standards before the deadline, otherwise you will get a 'Not Achieved' grade.

Authentic Work (The work must be your own)

- You may be asked to sign a statement that work handed in is your own.
- Any work produced by a person other than you will receive a "Not Achieved" grade.
- Where a student has been dishonest, he will receive a "Not Achieved" grade for that work.
- If you allow your work to be copied, you will also receive a "Not Achieved" grade.

Late Work

There is no tolerance for late work. Any work that is handed in after the due date will be given a 'Not Achieved' grade unless prior approval for lateness was granted or unless there are reasons of sickness, injury or other personal circumstance. In the case of sickness, a medical certificate is required. If you know you are going to be away on a due date, you must apply to your teacher for an extension and use the absence from Internal Form available from the HOD or Deputy Principal.

Students who cannot complete an assessment for reasons of sickness, bereavement, injury or any other personal circumstance, may be given the opportunity of assessment at a time suitable to both the student and the subject teacher. This assessment may be different to the rest of the class, but it will have the same difficulty level as the missed assessment. Again, a medical certificate is required in the case of sickness.

If you are away on the due date, you must arrange for the assessment to be brought in to school (e.g. by a parent, relative or friend).

Breaches

When a student breaks the rules on which the assessment is to be assessed they will be spoken to by the subject teacher and will be given a 'Not Achieved' grade. Any major breaches that impact on rules of the College will be passed onto the Pastoral Dean.

Further Assessment Opportunities

In some standards you may be given the opportunity to improve your grade by re-sitting the standard. This varies from subject to subject and depends on the nature of the achievement or unit standard. You will be told by your subject teacher about any reassessment opportunities. This will

NOT be available to students who handed in non-authentic work, allowed their work to be copied and those who did not submit work in the first place in the first assessment.

Inter-class Comparability

A clear system of check marking is used when there are two or more classes of the same standard, to ensure valid, reliable and consistent marking.

Appeals

Any concern you have about a grade must be raised with your subject teacher. In such cases you need to collect an appeal form from the school office or print one from the College Website and return this to the College within 5 days. The HOD will then have a look at your work and talk with the classroom teacher. If you still have concerns about the final decision made by the HOD, you can lodge an appeal with the Deputy Principal which will be assessed with three other independent people.

Derived Grade

It is encouraged by the College to do your best in every subject throughout the year. The Practice Examinations in the Academic year must be your best effort. They may need to be used to generate a grade for you should you medically be proven to not be able to complete External Examinations.

If this is the case and you need support, please contact the Deputy Principal and explain what incident had taken place. You will be encouraged to complete some paper work and get support from a medical practitioner.

Special Assessment Conditions

If you have been supported by the Learning Support Department and you are entitled to Special Assessment conditions and you feel you have not been given the support, you are entitled to see the Head of Learning Support and state your concerns. The Head of Learning support will investigate for you and talk to the appropriate staff to find out what can be done.

Subject Descriptions

The remainder of this booklet gives a brief outline of each subject offered in the senior school.

It is essential that consideration be given to subjects wanting to be studied at Levels 2 and 3 when making choices at Level 1. See the flow chart at the back of this booklet for details.

ARTS – Visual Arts

H.O.D. Mr. D. Dickson

Course Entry Requirements

Year 11 Has completed Art Option in Year 10 or at HOD's discretion

Year 12 Has 12 credits in N.C.E.A. Level 1 Art or at HOD's discretion

Year 13 Has 18 credits in N.C.E.A. Level 2 Art or at HOD's discretion

YEAR 11 ART LEVEL 1 NCEA

AS Number	Achievement Standard	Credits	Assessment Method
90915 1.3	Use drawing conventions to develop work in more than one field of practice	6	Internal
90916 1.4	Produce a body of work informed by established practice, which develops ideas, using a range of media	12	External

YEAR 12 ART LEVEL 2 NCEA

AS Number	Achievement Standard	Credits	Assessment Method
90476 2.3	Develop ideas in a related series of drawings appropriate to established painting practice	4	Internal
91321 2.4	Produce a systematic body of work that shows understanding of art making conventions and ideas within painting	12	External

YEAR 13 ART LEVEL 3 NCEA

AS Number	Achievement Standard	Credits	Assessment Method
91451 3.3	Systematically clarify ideas using drawing informed by established painting practice	4	Internal
91456 3.4	Produce a systematic body of work that integrates conventions and regenerates ideas within painting practice	14	External

If you are considering any of the following jobs for when you leave school, then art might be an essential skill to help you pursue that career.

Advertising artist	Airbrush artist	Audio-visual artist	Model builder
Art director	Animator	Courtroom sketcher	Display artist
Art teacher	Assistant curator	Display painter	Exhibit designer
Billboard artist	Cinematographer	Drafter	Fashion artist
Book illustrator	Costume designer	Editorial	Filmmaker
Cartoonist	Ceramic artist	Freelance artist	Furniture designer
Illustrator	Interior decorator	Landscape designer	Graphic arts technician
Motion picture artist	Magazine illustrator	Logo designer	Product designer

H.O.D. Mr. C. Wilson

The values of studying Music

Musicians are respected in all industries for being articulate, great communicators and listeners, able to work in a team, lead or support when appropriate, confident in front of an audience, respectful and encouraging to those around them, able to take on constructive advice, have integrity and meet deadlines. Complementary music careers are: broadcasting/journalism; audio-visual technical; events management; T.V./film/theatre; roadie; fashion, galleries and exhibitions... or just your basic international superstar!

Composition - students will learn to compose in a range of musical styles from Rock to Jazz to the atmospheric using specialist software. Students can also submit their more creative instrumental or song-writing works as compositions, such as an imaginative drum solo, rock guitar piece or setting lyrics to music. Not compulsory in Year 13.

Performance - is expected at Year 11 but not in Years 12&13 where the student can tailor-make their course based on their interests and skills from a wide range of standards.

Music Technology - students visit a professional recording studio and are recorded in small groups. In class, they then learn to use a digital audio editing program to refine their recordings.

Research – a great way to learn how bands and composers actually made their music so great or, e.g. study the rise and fall of an artist or genre. Students can choose their own topic in Years 12&13.

YEAR 11 MUSIC LEVEL 1 (Some credits at Level 2)

Entry Requirements: at least one year’s prior learning via the Year 10 Music Course or on a musical instrument or both; or approval by the H.O.D.

Learning Aspect	Credits	Assessment Method
Solo Performance	6	Internal
Group Performance	4	Internal
Composition	6	Internal
Music Technology (Level 2)	4	Internal

YEAR 12 MUSIC LEVEL 2 (Performance and non-performance courses available)

Entry Requirements: at least twelve credits in Level 1 or two years on a musical instrument or both; or approval by the H.O.D.

Learning Aspect	Credits	Assessment Method
Solo Performance	6	Internal
Solo Performance on a second instrument (optional)	(3)	Internal
Group Performance	4	Internal
Composition 1	4	Internal
Composition 2 (if not performing)	(6)	Internal
Research	4	Internal

YEAR 13 MUSIC LEVEL 3 (Performance and non-performance courses available)

Entry Requirements: at least twelve credits in Level 2 or three years on a musical instrument or both; or approval by the H.O.D. The course is tailor-made to the student’s interests and specialisms.

Learning Aspect	Credits	Assessment Method
Solo performance	8	Internal
Solo Performance on a second instrument (optional)	4	Internal
Group Performance	4	Internal
Composition - there are three options:		
Composition (using ICT or personal performance)	8	Internal
Composition as a Singer/Song-Writer	8	
Arranging	4	
Research	6	Internal

Mr. P. Hijzeen

Accounting is the language of business. The study of accounting involves students in the process of identifying, measuring and communicating financial information, which will enable them to make informed financial judgments and decisions.

The study of Accounting equips students with the ability to cope with the complexities of modern money management and provides students with an understanding of the financial world as it affects them.

Course Entry Requirements:

Year 11 At the discretion of the H.O.D. A keen interest in the subject would be of benefit.

Year 12 A minimum of 14 credits in N.C.E.A. Level 1 Accounting and N.C.E.A. Level 1 Mathematics.

Year 13 A minimum of 14 credits in N.C.E.A. Level 2 Accounting

(Number of standards offered depends on the individual ability of each student)

LEVEL 1 ACCOUNTING

The Year 11 Accounting Course aims to:

- develop students' understanding of the role of accounting in society as a financial literacy for individuals, community organisations and businesses.
- provide students with knowledge of the principles, processes and systems of accounting
- enable students to apply financial knowledge and skills to practical situations

There are SEVEN Achievement standards in the course and they contribute 24 credits towards the Level 1 National Certificate in Educational Achievement (N.C.E.A.).

The credits contributed towards the N.C.E.A. and assessment methods are as follows: **Cost: \$45**

AS Number	Achievement Standard Title	Credits	Assessment Method
1.1	Demonstrate understanding of accounting concepts for small entities	3	External
1.2	Process financial transactions for a small entity	5	Internal
1.3	Prepare financial statements for Sole Proprietors	5	External
1.4	Prepare financial information for a community organisation's annual general meetings	4	Internal
1.5	Interpret accounting information for Sole Proprietors	4	External
1.6	Make a financial decision for an individual or group	3	Internal
1.7	Demonstrate understanding of cash management for a small entity	4	Internal

LEVEL 2 ACCOUNTING

This expands students' understanding of the accounting cycle, business organizations and accounting principles. As well as developing the foundation laid in Year 11, students are introduced to Accounting Systems. Five achievement standards worth 19 credits will be offered.

Costs Books: \$45; Trip: \$140

AS Number	Achievement Standard Title	Credits	Assessment Method
2.1	Demonstrate understanding of accounting concepts for a sole proprietor that operates accounting subsystems	4	External
2.2	Demonstrate understanding of accounting subsystems for a trading firm	3	Internal
2.3	Demonstrate understanding of accounting processing	4	External
2.4	Prepare financial information for an entity that operates accounting subsystems	5	External
2.5	Interpret accounting information for sole proprietors that operate accounting subsystems	4	External
2.6	Report on an entity's accounting subsystem	4	Internal

LEVEL 3 ACCOUNTING

This course extends students with the introduction of Company Accounting. Six achievement standards worth 24 credits will be offered.

Accounting skills are relevant in all fields of business.

Cost: \$45

AS Number	Achievement Standard Title	Credits	Assessment Method
3.1	Demonstrate understanding of accounting concepts for a reporting entity	4	External
3.2	Demonstrate understanding of accounting for partnerships	4	Internal
3.3	Demonstrate understanding of company financial statement preparation	5	External
3.4	Prepare a report for an external user that interprets the annual report of a New Zealand reporting entity	5	Internal
3.5	Demonstrate understanding of management accounting to make a decision.	4	External
3.6	Demonstrate understanding of a job cost subsystem for an entity	4	Internal

Career options include

Banking, Accountancy, Teaching, Management and Commercial Enterprise.

H.O.D. Mr. D. Ivory

Economics is the study of how people choose to use resources.

Resources include the time and talent people have available, the land, buildings, equipment, and other tools on hand, and the knowledge of how to combine them to create useful products and services.

Important choices involve how much time to devote to work, to school, and to leisure, how many dollars to spend and how many to save, how to combine resources to produce goods and services, and how to vote and shape the level of taxes and the role of government.

(Number of standards offered depends on the individual ability of each student)

Course Entry Requirements:

Year 11 At the discretion of H.O.D. A keen interest in the subject would be of benefit.

Year 12 A minimum of 10 credits in N.C.E.A. Level 1 Economics.

Year 13 A minimum of 14 credits in N.C.E.A. Level 2 Economics.

LEVEL 1 ECONOMICS

Cost: \$50

AS Number	Achievement Standard Title	Credits	Assessment Method
1.1	Demonstrate understanding of consumer choices, using scarcity and/or demand	4	External
1.2	Demonstrate understanding of decisions a producer makes about production	5	Internal
1.3	Demonstrate understanding of producer choices using supply	3	External
1.4	Demonstrate understanding of how consumer, producer and/or government choices affect society, using market equilibrium.	5	External
1.5	Demonstrate understanding of a government choice where affected groups have different viewpoints	4	Internal
1.6	Demonstrate understanding of the interdependence of sector of the New Zealand economy	3	Internal

LEVEL 2 ECONOMICS

This looks at the issues that result from market forces. Students explore the economic issues of trade, growth and inflation. Students develop an awareness of policies that a government may implement to address economic issues and examine the impact Government policies have on various groups. There are five achievement standards at Year 12 Economics to make up the Level 2 Course worth 24 credits.

Cost: Book: \$45 Trip \$140

AS Number	Achievement Standard Title	Credits	Assessment Method
2.1	Analyse inflation using economic concepts and models	4	External
2.2	Analyse international trade using economic concepts and models	4	External
2.3	Analyse economic growth using economic concepts and models	4	External
2.4	Analyse unemployment using economic concepts and models	4	Internal
2.5	Analyse statistical data relating to contemporary economic issues	4	Internal
2.6	Analyse how government policy and contemporary economic issues interact	6	Internal
2.7	Analyse a contemporary economic issue of special interest using economic concepts and models	4	Internal

A combination of standards will be chosen for each school year.

LEVEL 3 ECONOMICS

This course covers both micro and macro-Economic theory. Five achievement standards worth 24 credits will be offered.

Cost: \$35

AS Number	Achievement Standard Title	Credits	Assessment Method
3.1	Demonstrate understanding of the efficiency of market equilibrium	4	External
3.2	Demonstrate understanding of the efficiency of different market structures using marginal analysis	4	External
3.3	Demonstrate understanding of micro-economic concepts	5	Internal
3.4	Demonstrate understanding of government interventions to correct market failures	5	Internal
3.5	Demonstrate understanding of macro-economic influences on the New Zealand economy	6	External

Career pathways include

Teaching, Banking, Economist, Local councils, and Journalism to name a few.

HOD Mrs. L. Balfour

Course Entry Requirements:

Year 11 A compulsory subject.

Year 12 A compulsory subject. Entry to Level 2 is at the discretion of the HOD; usually 12 Achievement Standards Credits at NCEA Level 1. Those 12 credits must include at least 1 from the External Examination 1.1, 1.2 or 1.3

Year 13 is optional. Entry to Level 3 is at the discretion of the HOD; usually 12 Achievement Standards Credits at N.C.E.A. Level 2. Those credits must include at least 1 from External Examination of either 2.1, 2.2 or 2.3.

Full NCEA Courses – 21 Achievement Standards' Credits are studied:

LEVEL 1 ENGLISH 8 External Assessed and 13 Internally Assessed

AS Number	Achievement Standard Title	Credits	Assessment Method
90849 1.1	Show understanding of specific aspects of studied written texts, using supporting evidence	4	External
908501 1.2	Show understanding of specific aspects of studied visual or oral texts, using supporting evidence	4	External
90052 1.4	Produce creative writing	3	Internal
90053 1.5	Produce formal writing	3	Internal
90857 1.6	Construct and deliver an oral text	3	Internal
90852 1.8	Explain significant connections across texts, using supporting evidence	4	Internal

LEVEL 1 SENIOR ENGLISH (ALTERNATIVE COURSE)

Level 1 credits are all Internally Assessed. Students studying this alternative course do not sit the External Examination. This course is designed for less academic students.

AS Number	Achievement Standard Title	Credits	Assessment Method
90052 1.4	Produce creative writing	3	Internal
90053 1.5	Product formal writing	3	Internal
90857 1.6	Construct and deliver an oral text	3	Internal
90852 1.8	Explain significant connections across texts using supporting evidence	4	Internal

LEVEL 2 ENGLISH

21 Achievement Standards' Credits are studied:
8 Externally Assessed and 13 Internally Assessed

AS Number	Achievement Standard Title	Credits	Assessment Method
91098 2.1	Analyse specific aspects of studied written texts, supported by evidence	4	External
91099 2.2	Analyse specific aspects of studied visual or oral texts supported by evidence	4	External
91101 2.4	Produce a selection of crafted and controlled writing	6	Internal
91102 2.5	Construct and deliver a crafted and controlled oral text	3	Internal
91104 2.7	Analyse significant connections across texts, supported by evidence	4	Internal

LEVEL 2 SENIOR ENGLISH (ALTERNATIVE COURSE)

The content of this course will vary depending upon the Standards gained by the students the previous year. The course will be Level 2 Achievement Standards which are all Internally Assessed, therefore students do not sit the External Examination. This course is designed for less academic students. GATEWAY students may select this course.

AS Number	Achievement Standard Title	Credits	Assessment Method
91101 2.4	Produce a selection of crafted and controlled writing	6	Internal
91102 2.5	Construct and deliver a crafted and controlled oral text	3	Internal
91104 2.7	Analyse significant connections across texts, supported by evidence	4	Internal

LEVEL 3 ENGLISH

21 Achievement Standards' Credits are studied:
8 Externally Assessed and 13 Internally Assessed

This is an academic course designed for students planning to go to University

AS Number	Achievement Standard Title	Credits	Assessment Method
91472 3.1	Respond critically to specified aspects of studied written text(s), supported by evidence	4	External
91473 3.2	Respond critically to specified aspects of studied visual or oral text(s), supported by evidence	4	External
92475 3.4	Produce a selection of fluent and coherent writing which develops, sustains, and structures ideas	6	Internal
92476 3.5	Create and deliver a fluent and coherent oral text which develops, sustains, and structures ideas	3	Internal
91478 3.7	Respond critically to significant connections across texts, supported by evidence	4	Internal

HOD Mr. M. Solomon

Course Entry and Pre-requisite Requirements

Year 11 has taken Te Reo Māori in Year 10 with the HOD's discretion.

Year 12 have gained 12 or more credits in NCEA Level 1 Te Reo Māori

Year 13 have gained 18 or more credits in NCEA Level 2 Te Reo Māori

LEVEL 1 TE REO MĀORI

The Year 11 course will offer four Achievement Standards worth a total of 24 credits.

AS Number	Achievement Standard Title	Credits	Assessment Method
91085 1.1	Whakarongo kia mōhio ki te reo o tōna ao	6	Internal
91086 1.2	Kōrero kia mōhio ki te reo o tōna ao	6	Internal
91087 1.3	Pānui kia mōhio ki te reo o tōna ao	6	External
91088 1.4	Tuhi i te reo o tōna ao	6	External
91089 1.5	Waihanga tuhinga i te reo o tōna ao	6	Internal

LEVEL 2 TE REO MAORI

The Year 12 course will offer four Achievement Standards worth a total of 22 credits.

AS Number	Achievement Standard Title	Credits	Assessment Method
91284 2.1	Whakarongo kia mōhio ki te reo o te ao torotoro	4	Internal
91285 2.2	Kōrero kia whakamahi i te reo o te ao torotoro	6	Internal
91286 2.3	Pānui kia mōhio ki te reo o te ao torotoro	6	External
91287 2.4	Tuhi i te reo o te ao torotoro	6	External
91288 2.5	Waihanga tuhinga auaha, i te reo o te ao torotoro	6	Internal

LEVEL 3 TE REO MĀORI

The Year 13 course will offer four Achievement Standards worth a total of 24 credits.

AS Number	Achievement Standard Title	Credits	Assessment Method
91650 3.1	Whakarongo kia mōhio ki te reo o te ao whānui	4	Internal
91651 3.2	Kōrero kia whakamahi i te reo o te ao whānui	6	Internal
91652 3.3	Pānui kia mōhio ki te reo Māori o te ao whānui	6	External
91653 3.4	Tuhi i te reo Māori o te ao whānui	6	External
91654 3.5	Waihanga tuhinga whai take i te reo Māori o te ao whānui	6	Internal

HOD Mr. G. McFarland

Course Entry Requirements

An achievement equivalent to the following or at the discretion of the HOD

Year 11 An adequate standard in Year 10 Mathematics

Year 12 12 MAC: 4 passes in Level 1 Mathematics or approval of HOD.

12 MAT 4 passes in Level 1 including a merit pass in Algebra 1.2 or the approval of the HOD.

Year 13 Maths with Calculus: Five passes in 12 MAT including a merit in 2.2, 2.6, 2.7, or the approval of the HOD. Maths with Stats: Four passes in 12 MAT including 2.2, 2.6, 2.11, 2.12 the approval of the HOD.

A Graphic Calculator is required for Senior A Mathematics.

Year 11 Mathematics Two courses are available.

LEVEL 1A MATHEMATICS (11MAT)

This course will offer six achievement standards worth a total of 22 credits as shown below.

Achievement Standards may be added or subtracted at the HODs discretion.

AS Number	Achievement Standard Title	Credits	Assessment Method
1.1	Apply numeric reasoning in solving problems	4	Internal
1.2	Apply algebraic procedures in solving problems		Unassessed
1.4	Apply linear algebra techniques (graphing)	3	Internal
1.5	Apply measurement in solving problems	3	External
1.6	Apply geometric reasoning in solving problems	4	Internal
1.9	Transformational Geometry	2	Internal
1.12	Demonstrate understanding of chance and data	4	External

LEVEL 1B MATHEMATICS (11 MXB)

This course will suit any student who has struggled with Mathematics in the junior school. The course involves helping students gain confidence with their Mathematics so that they can pass the 10 basic numeracy standards that all students need to pass to gain NCEA Level 1. Last year the pass rate was 98%, so success is possible for any student with a desire to do well. Additional credits are available for those who do well.

AS Number	Achievement Standard Title	Credits	Assessment Method
1.1	Apply numeric reasoning in solving problems	4	Internal
1.5	Apply measurement in solving problems	3	Internal
1.7	Apply right angled Triangles in solving problems	3	Internal
1.9	Transformational Geometry	2	External
1.10	Apply statistical methods to solve a problem	4	Internal

Year 12 Mathematics Two courses will be offered.

LEVEL 2A MATHEMATICS (12 MAT)

This course has the general aim of defining a level of mathematical understanding and a body of knowledge appropriate for pupils proceeding to tertiary level study. This course will offer the 6 Level 2 N.C.E.A. Achievement Standards below and be worth a total of 22 credits. Achievement Standards may be added or subtracted at the HODs discretion.

AS Number	Achievement Standard Title	Credits	Assessment Method
2.2	Apply graphical methods in solving problems	4	Internal
2.4	Apply trig relationships in solving problems	3	Internal
2.5	Use networks to solve problems	2	Internal
2.6	Apply algebraic methods in solving problems	4	External
2.7	Apply calculus methods in solving problems	5	External
2.12	Apply probability methods in solving problems	4	External

LEVEL 2B MATHEMATICS AND COMPUTING (12 MAC)

This course is a combination of Mathematics and Computing skills. The technological developments over the last 20 years have meant that these subjects have become very closely linked. The course is suitable for Mathematics students who will struggle with the heavy algebra content of the 2A Mathematics course. The course includes practical Mathematics topics that past students have found relevant for careers in the trades, the armed forces and in office jobs. It also contains work involving Microsoft applications (Word, Excel, Access, Publisher), webpage design using html/css, Photoshop and Robotics.

AS Number	Achievement Standard Title	Credits	Assessment Method
2.2	Using Sequences and Series to solve problems	2	Internal
2.4	Trigonometry used in the Construction Industry	3	Internal
2.5	Networks used to find Shortest Routes (e.g. GPS navigation systems)	2	Internal
2.9	Make a Statistical Inference	3	Internal
2.10	Conduct Experiments with Statistical Data	3	Internal
2.13	Investigate a situation involving a Simulation	2	Internal
US29776	Design a Website using html/css	3	Internal
US19773	Produce Digital Images for a range of media	3	Internal
	Design, build and use Robots		

Year 13 Mathematics Two courses will be offered.

LEVEL 3 MATHEMATICS WITH CALCULUS

This course suits any student wishing to advance to tertiary study in engineering, architecture, design and other careers. It is for highly motivated students with a proven ability in Mathematics at Level 2.

AS Number	Achievement Standard Title	Credits	Assessment Method
3.3	Apply Trigonometric methods in solving problems	4	Internal
3.5	Apply the Algebra of Complex Numbers in solving problems	5	External
3.6	Apply Differentiation methods in solving problems	6	External
3.7	Apply Integration methods in solving problems	6	External

LEVEL 3 MATHEMATICS WITH STATISTICS

This course suits any student wishing to advance to tertiary study in the health sciences, social sciences, business studies and other careers. It is for highly motivated students with a proven ability in Mathematics at Level 2.

AS Number	Achievement Standard Title	Credits	Assessment Method
3.2	Apply Linear Programming methods in solving problems	3	Internal
3.9	Investigate Times Series data	4	Internal
3.10	Investigate Bivariate Data	4	Internal
3.13	Apply Probability concepts in solving problems	4	External
3.14	Apply Probability Distributions in solving problems	4	External
3.15	Apply systems of Simultaneous Equations in solving problems	3	Internal

HOD Mrs. K. Pickering

Science is a systematic process of learning about how the universe works and what the universe is made of. Science relies on testing ideas with evidence gained from the natural world. Science helps you to shift facts from nonsense and improves your ability to understand today’s issues, make informed decisions and assess the credibility, reliability and validity of what you see and hear. Today’s careers increasingly require a strong foundation in science. Studying science opens doors not only in the fields such as forensics, medicine, pharmacology, engineering and architecture, but also into other fields such as commerce and administration, where the analytical and problem solving skills that science teaches are critical. Science prepares you for jobs that don’t exist yet.

Level 1 Science

There are 5 possible courses in Level 1 Science. **All students must choose at least one course in Year 11.** Students who are taking Biochemistry are also expected to take Physics. All of the standards being offered are only drafts; they may be subject to change.

GENERAL SCIENCE A

This course offers a mixture of Chemistry, Physics and Biology. It is designed to give students a basic understanding of all science areas with the possibility of specialising in Level 2. It will comprise a selection of the following standards, with a minimum of 16 credits offered in total.

AS Number	Achievement Standard Title	Credits	Assessment Method
Science 1.1	Demonstrate an understanding of aspects of mechanics.	4	External
Physics 1.1	Carry out a practical investigation that leads to a linear mathematical relationship.	4	Internal
Chemistry 1.1	Carry out a practical chemistry investigation with direction	4	Internal
Science 1.5	Demonstrate an understanding of chemical ideas relating to acids and base.	4	External
Science 1.9	Demonstrate understanding of genetic variation	4	External

GENERAL SCIENCE B

This course offers a mixture of Chemistry, Physics and Biology. It is designed to give students a basic understanding of all science areas and is designed for students not attending to continue with the sciences in Level 2. It will comprise a selection of the following standards, with a minimum of 16 credits offered in total. It is mainly made up of internal assessments and one external.

AS Number	Achievement Standard Title	Credits	Assessment Method
Science 1.7	Investigate the implications of the properties of metals and their use in society	4	Internal
Physics 1.1 or Chemistry 1.1	Carry out a practical investigation that leads to a linear mathematical relationship or Carry out a practical chemistry investigation with direction	4	Internal
Science 1.1	Demonstrate understanding of aspects of mechanics.	4	External
Science 1.11	Investigate biological ideas relating to interactions between microorganisms and humans.	4	Internal
Science 1.9	Demonstrate understanding of the formation of surface features in New Zealand	4	Internal

BIOCHEMISTRY

This course is designed for the more academic student who wants to specialise in the Sciences. It is designed to extend students and give them a better foundation for Level 2 Biology and Chemistry.

AS Number	Achievement Standard Title	Credits	Assessment Method
Science 1.5	Demonstrate an understanding of chemical ideas relating to acids and bases.	4	External
Chemistry 1.5	Demonstrate understanding of chemical reactions.	4	External
Science 1.9	Demonstrate understanding of genetic variation.	4	External
Chemistry 1:1	Carry out a practical chemical investigation with direction	4	Internal
Biology 1:2	Report on a biological issue		Internal
Chemistry 1.3	Demonstrate understanding of aspects of Carbon Chemistry		External

PHYSICS

Physics is a specialist subject that prepares the students better for level 2 Physics.

AS Number	Achievement Standard Title	Credits	Assessment Method
Science 1.1	Demonstrate understanding of aspects of mechanics.	4	External
Physics 1.1	Carry out a practical investigation that leads to a linear mathematical relationship.	4	Internal
Physics 1.3	Demonstrate aspects of electricity and magnetism.	4	External
Physics 1.4	Demonstrate understanding of aspects of wave behaviour.	4	External
Physics 1.5	Demonstrate understanding of aspects of heat.	4	External

T.I.C – Miss K. Pickering

The study of Biology provides students with a way of understanding the processes of all living things. What students learn is directly relevant to their species and the environment. Biology reminds humans of their connectedness with and reliance on all other life forms.

Studying Biology in school will emphasise the significance of New Zealand's unique fauna and flora and distinctive ecosystems. Biologists will help provide solutions to help New Zealand agricultural and horticultural production maintain its place as a leader in breeding more efficient or productive plants and animals, as well as contribute to medical and biotechnological advances. New Zealanders also lead the way in ecological conservation research.

Course Entry Requirements:

Year 12 10 or more credits from a Year 11 Science course, including Science 1.9 plus Literacy and Numeracy credits.

Year 13 14 credits at Level 2 Biology including Achieved Grade in genetics, or at the discretion of H.O.D.

LEVEL 2 BIOLOGY

The course is broken down into five achievement standards which are listed below

AS Number	Achievement Standard Title	Credits	Assessment Method
91153 2.1	Carry out a practical investigation in a biology context, with supervision	4	Internal
91156 2.4	Demonstrate understanding of life processes at the cellular level	4	External
91157 2.5	Demonstrate understanding of genetic variation and change	4	External
91158 2.6	Investigation a pattern in an ecological community	4	Internal
91155 2.3	Demonstrate understanding of adaptations of plants and animals to their way of life.	3	External

LEVEL 3 BIOLOGY

The course will be designed from several different achievement standards listed below.

The course will be designed for up to 20 credits with different achievement standards.

AS Number	Achievement Standard Title	Credits	Assessment Method
91603 3.3	Demonstrate understanding of the responses of plants and animals to their external environment	5	External
91604 3.4	Demonstrate understanding of how an animal maintains a stable internal environment.	3	Internal
91605 3.5	Demonstrate understanding of evolutionary processes leading to speciation.	4	External
91606 3.6	Demonstrate understanding of trends in human evolution.	4	External
91607 3.7	Demonstrate understanding of human manipulations of genetic transfer and its biological implications	3	Internal

T.I.C. Miss K. Pickering

Chemistry provides explanations for the properties of materials and provides us with ways of transforming materials into new and useful substances. It helps us to understand the changes that we see occurring in the natural and physical world and allows us to make educated choices about consumer products.

Some chemists work in laboratories designing new materials used in products such as medicines, food and beverage flavourings, superconductors, and vaccines. However, studying chemistry provides a good training for a wide range of careers including, marketing and project managers, environmental scientists and forensic scientist. Employers value the key skills of numeracy, problem solving and communication that are an integral part of all chemistry courses.

Any student considering a Science based course at Tertiary level should study Chemistry at school.

Course Entry Requirements

Year 12 A minimum of 10 credits in an NCEA Level 1 Science Course, including Science 1.5 and a minimum of 12 achievement standard credits in NCEA Level 1 Mathematics.

Year 13 14 Credits in Level 2 Chemistry including 91164 AND 91166, or at discretion of H.O.D **LEVEL 2**

CHEMISTRY

The Year 12 course is a complete course in itself, suitable for those who will not continue in the subject, and for those who intend studying chemistry at Year 13 and beyond.

AS Number	Achievement Standard Title	Credits	Assessment Method
91161 2.1	Quantitative Analysis	4	Internal
91162 2.2	Identification of Ions	3	Internal (time permitting)
91163 2.7	Oxidation – Reduction Reactions	3	Internal
91164 2.4	Bonding, Structure and Energy Changes	5	External
91165 2.5	Organic Substances	4	External
91166 2.6	Chemical Reactivity	4	External

LEVEL 3 CHEMISTRY

AS Number	Achievement Standard Title	Credits	Assessment Method
91388 3.2	Understanding Spectroscopic data in Chemistry	3	Internal
91393 3.7	Describe oxidation-reduction processes	3	Internal
91390 3.4	Describe the properties of particles and thermochemical principals	5	External
91391 3.5	Describe the properties of organic compounds	5	External
91392 3.6	Describe aqueous solutions using equilibrium principles	5	External
91389 3.3	Demonstrate understanding of chemical processes in the world around us	3	Internal (Optional)

T.I.C. Mr. M. Pohlenz

Physics lies at the heart of the natural sciences. Physics is an ideal starting point for science and engineering – almost any scientific problem can be approached using the ideas and methods of physics, which is why there are many "hybrid" disciplines such as astrophysics, biophysics, and geophysics.

The knowledge and processes used by physics have produced new and exciting technologies in use every day. Almost any piece of modern technology has its origins in physical principles such as mechanics, optics, electronics, thermodynamics, or nuclear physics. The problems studied in physics in finding out how nature works have excited Physicists with the thrills of explaining, seeing or doing something that no one has done before.

Course Entry Requirements:

Year 12 10 credits from any science including Science 1.1 and 12 credits from Level 1 Mathematics, or at discretion of H.O.D.

Year 13 15 credits in Level 2 Physics including 2.4 and 2.6.

LEVEL 2 PHYSICS

The Year 12 Course will consist of 5 achievement standards (23 credits)

AS Number	Achievement Standard Title	Credits	Assessment Method
90252 2.1	Carry out a practical physics investigation that leads to a non-linear mathematical relationship	4	Internal
90254 2.3	Demonstrate understanding of waves	4	External
90255 2.4	Demonstrate understanding of mechanics	6	External
90256 2.5	Demonstrate understanding of atoms and nuclear physics	3	Internal
90257 2.6	Demonstrate understanding of electricity and electromagnetism	6	External

LEVEL 3 PHYSICS

The Year 13 Course will consist of 5 achievement standards (24 credits)

AS Number	Achievement Standard Title	Credits	Assessment Method
91521 3.1	Carry out a practical investigation to test a physics theory relating two variables in a non-linear mathematical relationship	4	Internal
91523 3.3	Demonstrate understanding of wave systems	4	External
91524 3.4	Demonstrate understanding of mechanical systems	6	External
91525 3.5	Demonstrate understanding of modern physics	3	Internal
91526 3.6	Demonstrate understanding of electrical systems	6	External

T.I.C. Mrs. B. Raskin

Horticulture is a course suited to those interested in the science of plants, plant production, management and factors surrounding the horticulture industry of New Zealand.

The primary industries are responsible for the greatest portion of growth in the country's GDP.

Currently, the industry is in desperate need for passionate and able students to fill the widest variety of positions available in New Zealand, ranging anywhere from marketing to Horticultural and Agricultural scientists. This course is designed to help introduce the physiology of plants, their environmental requirements and the challenges that the industry currently faces to make it a viable and profitable business enterprise.

Course Entry Requirements

Year 11 10 Credits from any science, especially in the areas of Biology and Chemistry

Year 12 13 credits in Level 1 Horticulture including 1.9 and 1.10 or at the discretion of T.I.C.

Year 13 12 credits in Level 2 Horticulture including 2.2 and 2.4

Course Outline

LEVEL 1 HORTICULTURE

AS Number	Achievement Standard Title	Credits	Assessment Method
90918 1.1	Carry out a practical agricultural or horticultural investigation.	4	Internal
90157 1.2	Demonstrate practical skills used in agricultural or horticultural production	4	Internal
90923 1.9	Demonstrate knowledge of basic plant propagation techniques	4	Internal
AS 90924 1.10	Demonstrate knowledge of horticultural plant management practices and related plant physiology	5	External

LEVEL 2 HORTICULTURE

AS Number	Achievement Standard Title	Credits	Assessment Method
91289	Carry out an extended practical agricultural or horticultural investigation	4	Internal
91290 2.2	Demonstrate understanding of techniques used to modify physical factors of the environment for NZ plant production	4	External
91291 2.3	Demonstrate understanding of advanced plant propagation techniques used for commercial production in New Zealand	4	Internal
91292 2.4	Demonstrate understanding of how management practices influence plant growth and development in NZ commercial production	4	Internal

PHYSICAL EDUCATION

H.O.D. Mr. J. Pearson

Physical Education is a recommended in many careers and tertiary studies, for example: Physiotherapy, Physical Education Teacher, Personal Trainer, Coach, Sports Administration, Nutritionist, Sport Development, Sports Psychology, Sports Science, Outdoor Education, Sports History, Referencing, Massage, Sports Analysis, Sports Media.

Physical Education will provide students with the knowledge, understanding and appreciation of the human body, as it relates to movement and performance. Students will gain an appreciation of the contribution that physical activity has to the development of healthy living. Students have the opportunity to experience and participate in a wide range of physical activities, in a variety of contexts. Students will also be able to develop their interpersonal skills in a variety of settings.

Course Entry Requirements:

Level 1 Entry approved on selection process based upon performance in Year 9/10 PE discretion of HOD PE & Deans.

Level 2: Physical Education

At least 12 credits in NCEA Level 1 or at the discretion of HOD Physical Education.

Level 3: 14 Credits NCEA Level 2 Physical

Education, or at the discretion of HOD Physical Education.

LEVEL 1 PHYSICAL EDUCATION

The Year 11 Physical Education course contributes **20 credits** towards the Level 1 National Certificate in Educational Achievement (NCEA) and is covered in Six Modules of work

AS Number	Achievement Standard Title	Credits	Assessment Method
90962	Participate actively in a variety of physical activities & explain factors that influence own participation	5	Internal
90963	Demonstrate understanding of the function of the body as it relates to the performance of physical activity	5	Internal
90964	Demonstrate quality movement in the performance of physical activity	3	Internal
90966	Demonstrate interpersonal skills in a group & explain how these skills impact on others	4	Internal
90967	Demonstrate strategies to improve the performance of a physical activity & describe the outcomes	3	Internal

LEVEL 2 PHYSICAL EDUCATION

The Year 12 Physical Education course contributes **24 credits** towards the Level 2 National Certificate in Educational Achievement (NCEA) Students will acquire knowledge that will be used in a variety of practical sessions. The course involves 40 per cent practical and 60 per cent theory.

AS Number	Achievement Standard Title	Credits	Assessment Method
91327	Examine the role & significance of physical activity in the lives of young people in New Zealand	3	Internal
91328	Demonstrate understanding of how & why biophysical principles relate to the learning of physical skills	5	Internal
91329	Demonstrate understanding of the application of biophysical principle to training for physical activity	4	Internal
91330	Perform physical activity in an applied setting	4	Internal
91331	Examine the significance for self, others & society of a sporting event, physical activity or festival	4	Internal
91332	Evaluate leadership strategies that contribute to the effective functioning of a group	4	Internal

LEVEL 3 PHYSICAL EDUCATION

Year 13 Physical Education course contributes **18 credits** towards the Level 3 National Certificate in Educational Achievement (NCEA). The course has a high element of practical application where students are expected to put the knowledge they have gained from NCEA 2 into practical situations.

AS Number	Achievement Standard Title	Credits	Assessment Method
91498 3.1	Evaluate physical activity and devise strategies for life long well being	4	Internal
91499 3.2	Analyse a physical skill performed by self or others	3	Internal
91500 3.3	Evaluate the effectiveness of a performance improvement programme	4	Internal
91501 3.4	Demonstrate quality performance of a physical activity in an applied setting	4	Internal
91504 3.7	Analyse issues in safety management for outdoor activity to devise safety managements strategies	3	Internal

RELIGIOUS EDUCATION

H.O.D. Mr. C. Bolton

Religious Education in the Senior School is assessed using Achievement Standards. Program themes include: History, Christianity, Theology and Human Experience.

The subject is an important part of the on-going holistic development of every student at our College and is **compulsory** for all students.

The Religious Education program at the college follows the official program for Religious Education for Catholic Secondary Schools in Aotearoa/New Zealand, approved by the Catholic Bishops of New Zealand. It is entitled **UNDERSTANDING FAITH**.

LEVEL 1 RELIGIOUS EDUCATION

AS Number	Achievement Standard Title	Credits	Assessment Method
90816	Describe key feature of a sacred text	6	Internal
90817	Describe a significant aspect within the development of a religious tradition	6	Internal
90818	Describe key ethical principles of a religious tradition and how they are applied to an issue	6	Internal

LEVEL 2 RELIGIOUS EDUCATION

AS Number	Achievement Standard Title	Credits	Assessment Method
90821	Explain the changes in an expression of a religious tradition	6	Internal
90822	Examine an example of contemporary social action related to a religious tradition	6	Internal
90823	Explain the significance of a key belief within two religious traditions	6	Internal

LEVEL 3 RELIGIOUS EDUCATION

AS Number	Achievement Standard Title	Credits	Assessment Method
90825	Analyse a religious tradition(s) in Aotearoa New Zealand	6	Internal
90826	Examine the response of a religious tradition to a contemporary ethical issue	6	Internal
90827	Compare and contrast a religious tradition with a secular world view	6	Internal

Religious Education is a relevant subject especially if you are interested in any career that requires people skilled employment. For university study, it leads well into studies in Philosophy, Ethics, Law and World Religions. Philosophy, Ethics and Law cross over many disciplines including science, medicine and commerce. Religious Education is accredited for University Entrance.

SOCIAL SCIENCES - History

If you have a passion to learn History and have always been curious about the present and the past, then opt for History, it will get you going places! All Standards carry literacy value.

Course Entry Requirements

Year 11 Good literacy skills in reading and writing, sound grades in Year 10 exams and a thirst for knowledge.

Year 12 It is beneficial if students have taken Year 11 and passed at least three of the standards, however, 14-16 credits in other similar multi-skill subject such as English/Geography, as well as at the discretion of the Teacher in charge of History.

Year 13 At the discretion of the Teacher in charge of History. **Alternative to taking English.** It is beneficial if students have taken it before, however, 14 credits in a similar multi-skill based subject, such as Geography or English will be considered.

Career Pathways

History students are lucky that they can take the skills they learn and embark upon any possible career choice available. Employees in a wide range of careers, from the Business world through to the Scientific World accept History students as they are analytical, self-driven, independent thinkers who can be creative and critical, all widely desired skills in all future job hunting. So, it does not matter if you want to be a Criminologist, Surveyor, ICT, Engineer, Education or Lawyer, you will have a lot to offer any prospective employer.

Level 1 - History

All Level One History standards count towards Literacy credits, both reading and writing.

The following THEMES could be taught in 2020 and the understanding gained will be applied in the Achievement Standards throughout the year. Some of the **possible** contexts are given next to the themes.

Themes of study could include:

- **Freedom Fighters versus the Intolerant'**: We will consider Black Civil Rights events in the United States in the 1960s. From Rosa Parks and the Montgomery Bus Boycott to Malcolm X we will consider the various ways African Americans have fought for their freedom in the United States. What about New Zealand? – we do a cross-comparative study to consider similarities and differences with Maori fighting for their freedom in New Zealand.
- **'Expansionist Egos'**: Fascist Mussolini and Hitler, all had a huge impact on the world at some point during the 1920s to 1940s. What made these provocative leaders forces to be reckoned with?
- **'Explosive Events and Provocative Protests'**: Taking on the Big Guns over the issues of atmospheric testing, nuclear might; For the love of the game: Rugby – Kiwis clash over the 1981 Springbok Tour.

AS Number | Achievement Standard Title | Credits | Assessment Method

- 91001 | RESEARCH Part I: Carry out an historical investigation of an historical event, or place. (Students will collect evidence from a range of sources and organise it in a folder) | 4 | **Internal**
- 91002 | RESEARCH Part II: Demonstrate understanding of an historical event, or place of significance. (Students will present their findings in a creative type way, e.g. brochure, power point, feature magazine articles, website design) | 4 | **Internal**
- 91004 | Demonstrate understanding of different perspectives (point of views) of people in an historical event. | 4 | **Internal**
- 91005 | Describe the causes and consequences of an historical event. (Own choice) | 4 | **External (Fieldtrip Opportunity)**
- 91006 | Describe how a significant historical event affected NZ society. | 4 | **External**

Level 2 - History

Themes of study could include:

- **The Cold War World:** We will pick up the story following the conclusion of World War Two and look at the division of the world into a west and east sphere. The ideology of the 'Domino Theory' will be considered as we seek to understand how the Cold War shaped international relations for over 40 years. Events that could be considered:
 - The Korean War
 - West/East Germany
 - The Vietnam War – New Zealand's involvement
 - The Cold War at Home (American POV)
 - The Fall of the Berlin Wall
- **Out with the old and in with the new:** The Russian Revolution 1917
- **The New Zealand Wars.** In the 1840s and 1860s conflict over sovereignty and land led to battles between government forces and some Māori tribes.
- **Individual Research**

AS Number | Achievement Standard Title | Credits | Assessment Method

- AS91229 | RESEARCH Part I: Carry out a planned inquiry of an historical event, or place, of significance to New Zealanders. | 4 | **Internal**
- AS91230 | RESEARCH: Part II: Examine an historical event, or place, of significance to New Zealanders. | 5 | **Internal**
- AS91231 | Examine historical sources. (students who wish to gain extra history credits will be entered for this.) | 4 | **External**
- AS91232 | Interpret different perspectives. | 5 | **Internal**
- AS91234 | Examine how a significant historical event affected NZ society. (Such as the Vietnam War and The New Zealand Wars) | 5 | **External (Fieldtrip Opportunity)**

Level 3 - History

Level Three History is excellent preparation for tertiary study. **Alternative to taking English.** Skills taught in this course are transferrable academic skills. Students are taught to both find and read challenging texts before being asked to apply them in written text. The ability to write academic essays and applying correct referencing are developed throughout the year. All standards at Level Three are University Entrance approved.

Themes of study could include:

- **Champion of Colonisation OR Scapegoat: The Death of Captain Cook:** we study the three voyages of Captain James Cook and consider the long-term impact he has had on the region of the Pacific. Towards the end of his third journey he faces an untimely and gruesome death in Hawai'i. We analyse the reasons behind his death.
- **Loss of Sovereignty:** We consider the impact that western colonisation has had on the modern world. How have ideologies such as Social Darwinism impacted on native groups such as Hawaiians and Maori? A cross-comparison study between the New Zealand and Hawaiian colonial periods.
- **Independent Historical Research**
- **History Scholarship** - available to students at the discretion of the Teacher in Charge.

AS Number | Achievement Standard Title | Credits | Assessment Method

- 91434 | Research an historical event or place of significance to New Zealanders – e.g. Great Battles in History | 5 | **Internal**
- 91435 | Analyse an historical event, or place, of significance to New Zealanders – e.g. Great Battles in History | 5 | **Internal**
- 91436 | Analyse evidence relating to an historical event of significance to New Zealanders | 4 | **External**

- 91437 | Analyse different perspectives of a contested event of significance to New Zealanders | 5 | **Internal (Fieldtrip Opportunity)**
- 91439 | Analyse a significant historical trend and the forces that influenced it | 6 | **External (Fieldtrip Opportunity)**

SOCIAL SCIENCES - Geography

H.O.D. Ms. C. Spence

Geography is a chance to look at the world differently! Geographers study the natural environment (mountains, forests, coasts etc.) and the cultural environment (anywhere on earth affected by humans). We look at how these environments are created, modified and how people interact with them.

There are opportunities for fieldtrips in our local area as well as to other locations, such as Tongariro National Park and Rotorua.

LEVEL 1 GEOGRAPHY

Course Highlights: Learning about how earthquakes occur, the local weather and climate of Hastings. **Other Notes:** All standards apart from “Geographic Skills” count as Level 1 Literacy credits. Both the “Geographic Skills” and “Geographic Research” standards count for Level 1 Numeracy credits. Up to five Achievement Standards worth 18 credits may be offered.

AS Number	Achievement Standard Title	Credits	Assessment Method
91007	Extreme Natural Events	4	External
91008	Population Concepts	4	External
91010	Geographic Skills	4	External
91009	Sustainability	3	Internal
91011	Geographic Research	4	Internal
91012	Contemporary Geographic Issue	3	Internal
91013	Global Geographic Topic	3	Internal

LEVEL 2 GEOGRAPHY

Course Highlights: The volcanic systems of Tongariro Volcanic Centre, freedom camping in New Zealand and the global aspects of Malaria.

Other Notes: All standards count as Level 1 Literacy credits. The “Geographic Research” standard counts for Level 1 Numeracy credits. Up to five Achievement Standards worth 19 credits may be offered.

AS Number	Achievement Standard Title	Credits	Assessment Method
91240	Large Natural Environment	4	External
91242	Issues in Development	4	External
91243	Geographic Skills	4	External
91241	Urban Patterns	3	Internal
91244	Geographic Research	5	Internal
91245	Contemporary Geographic Issue	3	Internal
91246	Global Geographic Topic	3	Internal

LEVEL 3 GEOGRAPHY

Course Highlights: Learning about tourism development in Rotorua, finding out about tropical coral reefs and the impacts people have had on them and perspectives of people involved in the human trafficking business.

Other Notes: Geography is an approved subject for University Entrance. All standards count as Level 1 Literacy credits. The “Geographic Research” standard counts for Level 1 Numeracy credits. Up to five Achievement Standards worth 19 credits may be offered.

Number	Achievement Standard Title	Credits	Assessment Method
91426	Natural Processes	4	External
91427	Tourism in Rotorua	4	External
91429	Geographic Skills	4	External
91428	Geographic Events	3	Internal
91430	Geographic Research	5	Internal
91431	Contemporary Geographic Issue	3	Internal
91432	Global Geographic Topic	3	Internal

SOCIAL SCIENCES – Tourism Studies

H.O.D. Ms C. Spence

Tourism is a chance for students to learn about key aspects of the tourism industry in both New Zealand and overseas. It is an important vocational pathway in New Zealand especially if students are considering working in the tourism industry once they finish school.

There are opportunities for fieldtrips in our local area and to other locations, such as Rotorua.

LEVEL 1 TOURISM STUDIES

Level 1 introduces students to the key features of the tourism industry, calculations in the tourism industry, tourism in New Zealand and the history of tourism.

Other notes: All standards are unit standards and involve internal assessments. There is no external examination component. The standards taught will be chosen from the following list:

AS Number	Unit Standard Title	Credits
18237	Perform calculations for a tourism workplace	3
24732	Demonstrate knowledge of tourist characteristics and needs	3
24731	Demonstrate knowledge of destination New Zealand	4
24724	Demonstrate knowledge of the history of tourism	4
23761	Read and comprehend documents in English for a tourism workplace	3

LEVEL 2 TOURISM STUDIES

Level 2 Tourism builds on what students have learnt in Level 1. They learn about tourism around the world, work roles in tourism and the effect of tourism on people and the environment.

Other notes: All standards are unit standards and involve internal assessments. There is no external examination component. The standards taught will be chosen from the following list:

The standards taught will be chosen from the following list:

AS Number	Unit Standard Title	Credits
24728	Demonstrate knowledge of work roles in tourism	3
24729	Demonstrate knowledge of world tourist destinations	4
24730	Demonstrate knowledge of the business of tourism	4
24726	Describe and compare social and cultural impacts of tourism	2
24727	Describe and compare impacts of tourism on the physical environment	3
23767	Demonstrate knowledge of and use the Internet in a tourism workplace	2

LEVEL 3 TOURISM STUDIES

Level 3 Tourism involves in-depth studies on tourism in a range of places. These include New Zealand, Australia and the Pacific Islands.

Other notes: All standards are unit standards and involve internal assessments. Up to three standards worth 18 credits may be offered. There is no external examination component. The standards taught will be chosen from the following list:

The standards taught will be chosen from the following list:

Number	Unit Standard Title	Credits
3727	Demonstrate knowledge of Pacific Island countries as visitor destinations	5
18211	Demonstrate knowledge of Australia as a visitor destination	5
18212	Demonstrate knowledge of New Zealand as a travel destination	8
24733	Describe and promote a New Zealand tourist destination	5

Students may also have the opportunity to take Tourism Maori unit standards. Some of the standards that could be offered are:

Number	Unit Standard Title	Credits
31070	Maori placenames and reo Maori greetings and farewells in tourism	4
17385	Cultural practices in tourism and the impact of tourism on Maori	5
17578	Explain the value and benefits of whanau in tourism Maori	4
17786	Explain tikanga in tourism Maori	5
17784	Examine and recite appropriate karakia in tourism Maori	5
17391	Key forms of Maori communication, Maori identity in tourism Maori	5

T.I.C. – Mrs. T. Russell

Kenneth Clark the great Oxford lecturer, writer and BBC presenter on art, “passionately believed art could be a force for good; that it had a civilising, enriching and mind-altering power”.

Through art, architecture and sculpture we learn about human nature, religion, values, the way people lived in the past, how society has changed and why; as well as moving us through the beauty and majesty or challenging ideas that is possible when visionaries pick up a paintbrush, pencil or chisel.

The course is based upon a study of the art, architecture and sculpture of the **Late Renaissance** – think Raphael, Leonardo, Michelangelo and The Vatican. There is also a study of **Post-Modernist** art works and movements, including **Pop Art** which was centred in New York and led by such artists as Andy Warhol. Each study focuses around the style, meanings and context (times) of the works.

The **three Internal Assessments and one External Assessment** in this course enable the students to gain L3 and UE. There are other Internal Assessments available. Technically correct English skills in essay writing are *not* vital as they are not part of the assessment schedule. It is a subject that requires an appreciation of how society is reflected in the visual arts.

Each Achievement Standard is worth 4 credits with a **total of 16 possible credits** in the course. *Note: There are other Internal Assessments available.*

Achievement Standard	Number	Title	Credits	Assessment Method
91482	3.1	Demonstrate understanding of style in art works	4	External
91486	3.5	Constructing an argument based on interpretation of research in art history (Late Renaissance or a topic such as Social Activism or Maori/Pacifika art)	4	Internal
91487	3.6	Examine the different values placed on art works (Late Renaissance or Post-Modernism)	4	Internal
91488	3.7	Examine the relationship(s) between a theory and art works (Pop Art or Humanism)	4	Internal

The standards all carry value as UE Literacy credits for Reading (Internal Assessments) and both Reading and Writing (External Assessment). The written work required is in the form of paragraphs or essays but there is no mark schedule requirement for technically correct content. It must simply be coherent and clear. This applies to both the internal and external standards.

There are no restrictions on entering this course. You are more than welcome to join the class if you are a Level 3 student.

H.O.D. Mr. I. Smith

The course of DVC/Graphics and Design is designed to develop in students an ability to design and then express and communicate design ideas through drawing, sketching and other appropriate modes.

Studied activities in DVC/Graphics and Design introduce students to elements of a broad field of technology, and their relation to contemporary life, leisure pursuits and occupations in industry and professions.

Some of many areas that involve skills learnt in DVC/Graphics and Design include:

Architecture, Mechanical, Chemical, Aeronautical, Electronic and Civil Engineering, Draughting, Surveying, Industrial and Product Design, Computer Graphics, CAD, Photography, Kitchen Design, Digital Animation, Building Science, Multi-Media, Quantity Surveying, Furniture Designer, most trades eg. Carpentry, Engineering, Plumber, Sheet metal etc.

Course Entry Requirements:

Level 1 Must have taken in Year 10

Level 2 Must have achieved 10 Credits or better in Level 1 or at H.O.D's discretion.

Level 3 Must have achieved 12 credits or better in Level 2 or at HOD's discretion.

LEVEL 1 DVC (Design and Visual Communication), formerly Graphics and Design

DVC/Graphics and Design provides a range of varied activities in designing and graphic communication. An emphasis is placed on problem solving, innovation, technical competency and presentation.

AS Number	Achievement Standard Title	Credits	Assessment Method
91063 1.30	Produce freehand sketches that communicate design ideas	3	External
91064 1.31	Produce instrumental, multi-view orthographic drawings that communicate technical features of design ideas.	3	External
91065 1.32	Produce instrumental paraline drawings to communicate design ideas	3	External
91066 1.33	Use rendering techniques to communicate the form of design ideas	3	Internal
91067 1.34	Use the work of an influential designer to inform design ideas	3	Internal
91068 1.35	Undertake development of design ideas communicated through graphics practice	6	Internal
91069 1.36	Promote an organized body of design work to an audience using visual communication techniques	4	Internal

LEVEL 2 DVC (Design and Visual Communication), formerly Graphics and Design

The course is structured to enable students to extend their understanding and skills in designing to specified needs and graphic communication from conceptual ideas to evaluation and presentation.

The course is structured around three areas:

- Graphic Communication
- Environmental and Spatial Design
- Technological and Product Design

AS Number	Achievement Standard Title	Credits	Assessment Method
91337 2.30	Communicate design ideas using visual communication techniques	3	External
91338 2.31	Use working drawings to communicate technical details of a design	4	External
91339 2.32	Produce instrumental perspective projection drawings to communicate design ideas	3	External
91340 2.33	Use the characteristics of a design movement or era to inform own design ideas	3	Internal
91341 2.34	Develop a spatial design through graphics practice	6	Internal
91342 2.35	Develop a product design through graphic practice	6	Internal

LEVEL 3 DVC (Design and Visual Communication), formerly Graphics and Design

The emphasis is on the solution of product and spatial design problems and the comprehensive and precise graphic communication of this information.

Students will show evidence of their ability to understand and successfully apply the design principles and processes to a variety of design situations. They will be expected to illustrate innovation and creativity together with an understanding and appreciation of the technological and environmental requirements in the process of developing, refining and testing suitable solutions. Candidates will be required to illustrate knowledge, skills and imagination in communicating conceptual ideas, detailed information and final solutions through a variety of forms of drawing and graphic presentation.

AS Number	Achievement Standard Title	Credits	Assessment Method
3.30	Initiate design ideas through exploration	4	External
3.31	Develop a visual presentation that exhibits a design outcome to an audience	6	Internal
3.32	Resolve a spatial design through graphics practice	6	Internal
3.33	Resolve a product design through graphic practice	6	Internal
3.34	Produce working drawings to communicate production details for a complex design	6	External

T.I.C. Mr. M. Popplewell

Digital Technology and Design continues to make big strides at St. John’s College and will continue to grow in the future. Students have the opportunity to learn skills in Microsoft Word, Publisher, Excel and Access. Computer programming is available in the drag and drop language of Scratch and the text-based language of Python. 3-D modelling is offered using a range of packages and some of these models will be printed on the 3D printer. Webpage development is also available using html 5 and CSS 3. Robotics and looking at networking technologies are also on offer, as we move our students away from users of Digital Technology into creators of Digital Technology.

11 DIGITAL TECHNOLOGY (11 DTT)

The Year 11 course involves 19 Achievement Standards credits with work including Microsoft applications, webpage design, computer programming and computer science knowledge. Students with any range of abilities are welcome to join the class. Many students know they were meant to do this course, while others ‘discover’ that it is for them not long after they begin.

AS Number	Achievement Standard Title	Credits	Assessment Method
1.1	Create a Proposal	3	Internal
1.8	Searching & Sorting Algorithms	3	Internal
1.4	Develop a Digital Media Outcome	4	Internal
1.8	Construct a Basic Computer Program	3	Internal
1.9	Use Basic Iterative Processes to plan and develop a Digital Outcome	6	Internal
	Design, build and use Robotics		
TOTAL CREDITS		19	

12 Computer Science (12 CPS)

The course involves work that continues with the topics taught in the Level One Digital Technology course, with a focus upon computational thinking. This includes more advanced use of the databases and Python programming and computer science knowledge. It also includes networking, use of robotics.

AS Number	Achievement Standard Title	Credits	Assessment Method
2.3	Construct an advanced Database	4	Internal
2.7	Develop an advanced Python program	4	Internal
2.8	Use Advanced Iterative Processes	6	Internal
2.9	Analyse a Digital Technology Concept	3	External
	Design, build and use Robotics		
TOTAL CREDITS		17	

12 Digital Design (12 DDS)

The course involves work that continues with the topics taught in the Level One Digital Technology course, with a focus upon digital design outcomes. This includes more advanced use of websites, print and film outcomes and knowledge of the design cycle.

AS Number	Achievement Standard Title	Credits	Assessment Method
2.4	Use Advanced Techniques to develop a DMO	4	Internal
2.1	Conduct a Digital Technologies Inquiry	6	Internal
2.2	Apply Conventions to develop a design of a DMO	3	Internal
2.10	Present a Summary of developing a DMO	3	External
	Design, and develop Print Outcomes		
TOTAL CREDITS		16	

13 Computer Science (13 CPS)

This course will suit students who showed competence in 12 Computer Science in the previous year. The course involves furthering knowledge of databases, and computer programming with Python. The course caters for those who wish to pursue a tertiary course in Digital Technology.

AS Number	Achievement Standard Title	Credits	Assessment Method
3.3	Construct a Complex Database	4	Internal
3.7	Develop a Complex Python program	4	Internal
3.8	Use Complex Iterative Processes	6	Internal
3.9	Evaluate a Digital Technology Concept	3	External
	Design, build and use Robotics		
TOTAL CREDITS		17	

13 Digital Design (13 DDS)

This course will suit students who showed competence in 12 Digital Design in the previous year. The course involves furthering knowledge of Websites, Photoshop, film and print outcomes and about the design cycle. The course caters for those who wish to pursue a tertiary course in Digital Design.

AS Number	Achievement Standard Title	Credits	Assessment Method
3.4	Use Complex Techniques to develop a DMO	4	Internal
3.1	Conduct a Critical Digital Technologies Inquiry	6	Internal
3.2	Apply UX methods to develop a design of a DMO	3	Internal
3.10	Present a Reflective Analysis of developing a DMO	3	External
	Design, and develop Print Outcomes		
TOTAL CREDITS		16	

TECHNOLOGY – Culinary Arts

T.I.C. Mr. C Ireland

LEVEL 1 CULINARY ARTS

Units towards the National Certificate in Hospitality (Introductory Cookery) (Level 2)

This course has been designed to develop your cookery skills. It creates a strong base for year 12 and year 13. It is a good foundation that will suit many career paths from becoming an apprentice chef or cook or to further education at polytechnics. It could even help you get a part time industry job, some of these units are level two industry based units and as such students must be involved with the Saints kitchen catering team, producing high quality catering for functions throughout the school, for paying guests, in a manner and style expected within industry.

The following Standards are being offered.

AS Number	Achievement Standard Title	Credits	Assessment Method
167	Practice food safety methods in a food business	4	
13275	Cook food items by steaming	2	
13278	Cook food items by roasting	2	
13280	Prepare fruit and vegetable cuts	2	
13281	Prepare & present basic sandwiches for service	2	
13283	Prepare and present salads for service	2	
13284	Clean food production areas and equipment	2	
13285	Handle & maintain knives in a commercial kitchen	2	

Total Credits = 18 credits.

Estimated costs: Course fee - \$120.00 per year.

LEVEL 2 CULINARY ARTS

Units to finish off the National Certificate in Hospitality (Introductory Cookery) (Level 2)

This course has been designed to extend your level one skills. It creates a strong base for year 13. It is a good foundation that will suit many career paths from becoming an apprentice chef or cook or to further education at polytechnics. It could even help you get a part time industry job, These units are level two industry based units and as such students must be involved with the Saints kitchen catering team, producing high quality catering for functions throughout the school, for paying guests, in a manner and style expected within industry.

The following Standards are being offered:

AS Number	Achievement Standard Title	Credits	Assessment Method
167	Practice food safety methods in a food business (Unit 167 is only required if the student did not do year 11 culinary arts)	4	
13271	Cook food items by frying	2	
13272	Cook food items by baking	2	
13273	Cook food items by boiling	2	
13274	Cook food items by poaching	2	
13276	Cook food items by grilling	2	
13277	Cook food items by braising and stewing	2	
13325	Prepare and bake basic cakes, sponges, and scones in a commercial kitchen	4	
13344	Demonstrate knowledge of the characteristics of commercial cookery methods and their applications	3	
20666	Demonstrate knowledge of contamination hazards and control methods in a food business	2	

Total Credits = 25 at level 2 or 21 credits if the student completed year 11 culinary arts.

Estimated costs: Course fee - \$120.00 per year.

LEVEL 3 CULINARY ARTS

Course Entry Requirements

Students must have obtained at least 20 credits at Level 2, or at the discretion of the HOD of Food Technology.

Course Outline

This course has been designed to extend the students level 2 skills and creates a strong base for many career paths from becoming an apprentice chef, or barista to further education at polytechnics. It could even help you get a part time industry job, helping you pay your way through university.

These are level 3 industry based units and as such students must be involved with the Saints kitchen catering team, producing high quality catering for functions throughout the school, for fee paying guests, in a manner and style expected within industry.

The following Standards are being offered.

AS Number	Achievement Standard Title	Credits	Assessment Method
168	Demonstrate knowledge of food contamination hazards & control methods used in a food business	4	
13314	Prepare and cook egg dishes in a commercial kitchen	4	
13316	Prepare and cook basic pasta dishes in a commercial kitchen	4	
17284	Demonstrate knowledge of coffee origins and production	3	
17288	Prepare & present espresso beverages for service	5	

Total Credits = 20 at level 3

Estimated costs: Course fee - \$120.00 per year.

TECHNOLOGY – Materials Technology

Teachers – Mr. M. Scott

Course Entry Requirements

Level 1 At the discretion of the H.O.D., should have taken at Year 10 level.

Level 2 Must have obtained 15 credits in Year 11 Materials Technology, or at the discretion of the H.O.D.

Level 3 At the discretion of the H.O.D. but should have taken Year 12 level or Materials Technology at Year 11.

Materials Technology is a Unit Standards course with units being chosen from industry related courses. Each year builds on the experiences gained from the previous year, so that students increase both their personal skills and acquire the ability to plan and take charge of projects. If Materials Technology was not taken as an option at year 10 then it would be extremely difficult to cope with the course at year 11.

The programme at Level 1 leads to the BCATS entry level certificate and at Level II the advanced. These certificates could assist in gaining entry to higher level courses or finding a job in a trade. We aim to equip the students with the skills to do well, perseverance, tenacity, concentration and skill. The projects attempted may change but all must be completed as per the specifications just like in the real world!

Later in the year there may be time for personal projects but even then there is an expectation that a plan and or specification is adhered to.

Each year's course has a fee for consumables used and costs for project materials. This information on approximate costs is available on request.

LEVEL 1 MATERIALS TECHNOLOGY

AS Number	Achievement Standard Title	Credits	Assessment Method
24352 Level 1	Demonstrate knowledge of and apply safe working practices	2	Internal
24355 Level 1	Demonstrate knowledge of construction and manufacturing materials used	4	Internal
24356 Level 1	Apply elementary workshop procedures and processes for BCATS projects	8	Internal
25919 Level 1	Use hardware and fastenings for BCATS projects	2	Internal
25920 Level 1	Use joints for BCATS project	3	Internal

With literacy and numeracy credits gain BCATS Entry Certificate

LEVEL 2 MATERIALS TECHNOLOGY

AS Number	Achievement Standard Title	Credits	Assessment Method
12927 Level 2	Identify select and maintain and use hand tools for BCATS projects	6	Internal
12932 Level 2	Construct timber Garden furniture	8	Internal
24354 Level 2	Demonstrate knowledge of and applying safe working practice in a BCATS workplace	4	Internal
24357 Level 2	Receive instructions and communicate information in relation to BCATS projects	4	Internal
25921 Level 2	Make a cupboard as a BCATS project	6	Internal

With Literacy Credits gain BCATS Advanced Certificate

LEVEL 3 MATERIALS TECHNOLOGY - BCATS Level 3

AS Number	Achievement Standard Title	Credits	Assessment Method
29684 Level 3	Undertake a Stage 3 BCATS project	12	Practical
29677 Level 3	Workplace Safety Practices	2	Safety Application
29678 Level 3	Demonstrate knowledge, selection and use of materials for Stage 3 Project	4	Theory & Practical
29679 Level 3	Develop and use BCATS documentation for Stage 3 Project	8	Theory Documentation
29860 Level 3	Communicate and work collaboratively in Stage 3 BCATS project	5	Practical Collaboration
29861 Level 3	Measure and calculate for a Stage 3 BCATS project	3	Theory & Practical
29682 Level 3	Select, use and maintain tools and equipment for a Stage 3 BCATS project	4	Theory & Practical
29863 Level 3	Incorporate other building and allied trades into a Stage 3 BCATS project	2	Practical

All of the Standards at Level 3 are internally assessed, and all (with the exception of 29863) **MUST** be completed in conjunction with US29684 (Undertake a Stage 3 BCATS project) Effectively this makes the course an “all or nothing course” where students will undertake a large Stage 3 Project throughout the year, complete checklists and documentation and all credits will be completed and signed off late in the year.

Please note that all of the above standards may not be offered during the year due to workload concerns- rather, the course will be kept to a manageable number of credits.

This is the first year that BCATS standards have been introduced at Level 3, and we envisage that students will undertake one of two or three different projects throughout the year.

The Stage 3 BCATS projects are designed to be flexible, relatively complex, with a range of materials and skills being used. Constructions such as seating areas, storage sheds, open or enclosed shelters, shelving and cupboard units, playhouses, gardens and decking areas have been used at other schools

GATEWAY

Co-ordinator: Mrs Sue Ross

Unit	Description	Level	Credits
6400	Manage First Aid in Emergency Situations	3	2
1980	Describe from an employment perspective, ways with dealing with employment relations problems.	3	3
17602	Apply Hazard identification and risk assessment procedures in the workplace	3	4
4251	Plan a career pathway	3	2
17953	Apply safe working practices in the workplace	2	4
19522	Undertake Job Safety Analysis	2	4
6400	Manage First Aid in emergency situations.	2	2
6402	Provide resuscitation level 2	1	1
497	Demonstrate knowledge of workplace Health and Safety Requirements.	1	3
17602	Apply hazard identification and risk assessment procedures in the workplace	3	4
19522	Undertake job safety analysis	3	3
22316	Demonstrate knowledge of the management of drug and/or alcohol-related problems in the workplace	3	4
30906	Plan and engage an activity intended to help the community.	3	6

Students will achieve most of the Credits above depending on their individual Plan. Some students will also work on Industry Unit Standards depending on what industry they go into for work experience.

In previous years, students have gained apprenticeships in:

- Building
- joinery
- turf management
- plumbing
- mechanics
- farriery

Other students have gained places at tertiary institutes studying:

- Graphic Design
- Radio Broadcasting
- Carpentry
- Hospitality
- Tourism
- Retail
- Sports Coaching

	YEAR 9	YEAR 10	YEAR 11	YEAR 12	YEAR 13
	Religious Education	Religious Education	Religious Education	Religious Education	Religious Education
	English	English	English → or Senior English	English → or Senior English	English
	Te Reo Maori -----	Te Reo Maori →	Te Reo Maori →	Te Reo Maori →	Te Reo Maori
	Mathematics	Mathematics	Mathematics or → Practical Maths	Senior Maths or → Mathematics	Senr Mathematics → Maths with Calculus → Maths with Statistics
	Science	Science	Practical Science	Physics → Chemistry → Biology → and/or Horticulture -----	Physics → Chemistry → Biology → Horticulture
	Social Studies	Social Studies	Geography ----- →	Geography → Tourism -----	Geography → Tourism
			History ----- →	History ----- →	History
	The Arts				Art History
	Physical Education	Physical Education	Physical Education -----	Physical Education -----	Physical Education -----
	Music ----- →	Music →	Music →	Music →	Music
	Art ----- →	Art ----- →	Art →	Art →	Painting
	Material Technology	Material Technology	Material Technology	Material Technology →	Material Technology
	Food Technology	Food Technology	Culinary Arts →	Culinary Arts	Culinary Arts
	Digital Technology	Digital Technology →	Digital Technology	Digital Design →	Computer Science
	DVC →	DVC →	DVC →	DVC →	DVC
	Business Studies	Business Studies	Economics → Accounting →	Economics → Accounting →	Economics → Accounting → Gateway
	Prerequisite →				
	Recommended -----				