



COLLINGWOOD AREA SCHOOL

SENIOR SCHOOL COURSES

2021

NCEA STUDENT HANDBOOK



photo credit: Sarah-Renee

INTRODUCTION

Tēnā koutou e ngā whānau o te kura o Aorere

We are delighted to share with you the Senior School Course Booklet for 2021. This year we are offering the same essential framework but with new opportunities, and improved levels of staffing to deliver these options. The 1 hour periods aim to provide more in-depth and focussed learning.

Obviously, this handbook outlines the subjects that are available for next year but it also provides you with information about the structure and requirements of the qualifications you can work towards. These qualifications include the traditional Levels 1, 2 and 3 NCEA pathways and the Vocational Pathways that sit alongside Levels 2 and 3 NCEA. Within your subject selection you need to take into consideration any previous results and your intended career pathway.

The senior timetable is flexible to match your needs. This means it is possible to change some subjects term-by-term depending on your interest and your progress. However, changes are only made after consultation with your subject teacher and your parents.

Do remember that because we are a relatively small kura, it is likely that we will have Level 2 and 3 courses will be running together. This is a real advantage because it means you have the opportunity to study a multi-level course and provide tuakana - teina (relationship between learners).

Above all else, you must make sure that your course selection allows you to meet the requirements of each level of NCEA, and for University Entrance and Scholarship. If you are not sure what this involves, then ask!

Although this booklet only includes the subjects taught here at CAS, you need to remember that almost any other subject you are interested in is possible through Distance Learning, Telford, the Correspondence School Te Aho o Te Kura Pounamu and New Zealand NET. Please do not think that just because it is not included in this booklet that you cannot take a subject. Again, talk to a mentor, subject teacher, Dean or Principal to see if your subject choice can be accommodated. Take the time to plan your whole course of study so you understand whether each subject choice moves you along the pathway you choose.

We look forward to working alongside you on the next step of your journey. Remember, if you have any questions, just ask.

Hugh Gully

Principal

GUIDELINES FOR SENIOR SUBJECT SELECTION 2021

YEAR 11 STUDENTS

- MUST TAKE 6 subjects (3 compulsory and 3 of choice)
- Compulsory subjects are: English, Mathematics and Science

YEAR 12 STUDENTS

- MUST TAKE 6 subjects
- English is recommended for those looking at University and some tertiary study.
- If you are considering University read the UE requirements carefully.

YEAR 13 STUDENTS

- MUST TAKE 5 subjects None are compulsory
- Students considering tertiary study must ensure that the course selected meets the tertiary entry requirements

GUIDANCE FOR COURSE SELECTION

Ability	+ Interest	+ Occupation	= Subject choice
How good are you at a subject?	What do you enjoy?	If you don't know what you want to be, keep your options open by not specialising too soon	

- Plan your course selection through to the end of your secondary schooling. You should be checking the recommended entry requirements needed at the next level to ensure you will be eligible for entry into courses you wish to take in later years.
- Remember that Mathematics and Sciences beyond Level 1 are often basic requirements for many careers.
- Check that you have the necessary prerequisites for university studies or specific tertiary and training courses.
- Research shows that the two main influences on subject choice are:
 - o What subjects your friends are taking
 - o Who is teaching a particular subject

Neither of these should influence your subject choice, as your friends may not be in the same class as you next year and no one yet knows who will be teaching specific 2019 subjects

- CONCENTRATE ON WHAT YOU NEED FOR YOUR FUTURE.
- Discuss your proposed course selection with:
 - o Your parents/caregivers
 - o Your teachers
 - o Your Dean or Mentor
 - o Senior Management
- Be aware that there are now a wide range of available subjects. Not only are there the typical school subjects but there are many others available from many sources. Do look carefully at the final section on Alternative Education.

SUBJECT SELECTION and CONFIRMATION

It is really important that all students discuss their subject selections with your parents and caregivers, and with subject teachers if you are not sure of whether you need to take a particular subject.

During the week prior to school starting for 2021 all students intending to study (NCEA L1 to L14) are required to meet with the Senior Dean and Principal to confirm their course for the year. Parents are welcome to come in at this point to discuss any concerns.

QUALIFICATIONS IN THE SENIOR SCHOOL

NATIONAL CERTIFICATE OF EDUCATIONAL ACHIEVEMENT - NCEA

To complete an NCEA certificate, students must earn credits. They attain credits by meeting standards in their chosen subject areas. Some standards will be assessed internally by the school and others will be assessed nationally in external examinations. Credits may be gained by achieving either through Achievement Standards or Unit Standards.

ACHIEVEMENT STANDARDS

These may be achieved internally or externally. Achievement standards are designed so that satisfactory work is awarded an "Achieved" grade, good work receives a "Merit" grade and outstanding work receives an "Excellence" grade. These grades indicate how well a student has performed, but do not alter the number of credits gained for that standard.

UNIT STANDARDS

These are all internally assessed and credits gained may count towards various National Certificates and NCEA. They differ from Achievement Standards in that in general they can only be achieved. Unit standards are industry based units of work.

Requirements for NCEA Certificates

Level 1	Level 2	Level 3	Level 3		
80 Credits Including 10 literacy 10 numeracy	You must have Level 1 numeracy and literacy 80 Credits at Level 2 OR	60 Credits at Level 2 or above plus 20 credits at any Level	80 Credits at Level 3 OR	60 Credits at Level 3 or above plus 20 credits at Level 2	
				Level 1 - 80 Credits at any Level, including 10 in literacy (English or Te Reo) and 10 in numeracy (Mathematics).	
				Level 2 - 80 Credits at Level 2 or a minimum of 60 credits at Level 2 or above and 20 credits at any other Level.	
				Level 3 - 80 credits at Level 3 or a minimum of 60 credits at Level 3 or above and 20 credits at Level 2.	

LEVEL ONE LITERACY AND NUMERACY REQUIREMENTS

A minimum of 10 credits in both literacy and numeracy are required through either:

- Achievement standards - Specified achievement standards available through a range of subjects (minimum total of 10 credits in each), or
- Literacy standards and Numeracy Standards –this is a package of three unit standards (total of 10 credits - **all** three required).

NB* Students need to gain literacy and numeracy through their Achievement Standards **or** the alternate Unit Standard – you cannot combine the two systems to get your 10 credits.

Students must have Level 1 numeracy and literacy before they can achieve their NCEA Level 2 certificate.

CERTIFICATE ENDORSEMENT

- Students are able to achieve Level 1, 2 or 3 NCEA with Merit or Excellence Certificate Endorsements – this is recognition of consistently high achievement across subjects.

Merit Endorsement at Level 1, 2 or 3
50 Credits at Merit or Excellence at the level of endorsement

Excellent Endorsement at Level 1, 2 or 3
50 credits at Excellence at the level of endorsement

- Students can accumulate Merits and Excellences over more than one year and any entitled endorsement of a previous NCEA certificate will be awarded.

COURSE (SUBJECT) ENDORSEMENT

- A student must gain 14 credits in a single year at Merit/Excellence in order to gain a course endorsement. Each student's achievement for course endorsement must include at least 3 credits at merit/excellence from internally assessed standards as well as 3 credits at merit/excellence from externally assessed standards. Excluded from this rule are Physical Education, Religious Studies and Level 3 Visual Arts.

OTHER NATIONAL QUALIFICATIONS

- There are many National Certificates, National Diplomas and other qualifications. Credits gained at school for Levels 1, 2 and 3, together with those from further study and the workplace can be used towards these certificates and diplomas.
- To gain a National Certificate you must have a specified number of credits, usually gained over 2 years.
- Vocational Pathway Awards - these are based on six broad industry areas: Manufacturing and technology, Construction and infrastructure, Creative industries, Primary industries, Social and communication services, and the Services industry. This award sits alongside Level 2 and shows employers that you have the skills they might be looking for in their field of business. To gain this award you need Level 1 literacy and numeracy and 60 Level 2 or above standards (including 20 sector-related standards from the same sector pathway e.g. 20 Tourism credits for the Services industry)

NEW ZEALAND SCHOLARSHIP

- Scholarship is a monetary award to recognise top Level 3 students
- It does not earn credits towards a qualification, but does appear on a student's Record of Achievement
- Scholarship in each subject can be gained at two levels, either 'Scholarship' or 'Outstanding Performance'
- The content assessed in each subject is the same as that covered in the Level 3 Achievement Standards
- Candidates may enter scholarship in one or more subjects and this decision is made mid-way through the year
- Students interested in scholarships should discuss it with their teachers early in the year
- There is a fee payable for Scholarship exams on top of the NCEA payment.

UNIVERSITY ENTRANCE

To qualify for University Entrance through NCEA students need to achieve the following:

- **14 Level 3 credits in each of THREE subjects** from the approved subject list
- **10 credits in English at Level 2 or higher** (5 must be reading and 5 must be writing)
- **10 credits in Mathematics at Level 1 or higher**

U N I V E R S I T Y E N T R A N C E	Level 3 or Higher 42 credits		
	14 credits in one “approved subject”	14 credits in another “approved subject”	14 credits in another “approved subject”
	Level 2 or Higher		
	10 credits in English or Te Reo Maori (including 5 reading , 5 writing)		
	Level 1 or Higher		
	10 credits in mathematics or statistics and probability		

- Students need to become increasingly aware of the importance of certificate endorsements especially at year 12 and 13. For example, a year 12 student can obtain a level 2 Excellence endorsement **that can lead** to university scholarships.
- Entry to university has become increasingly more restrictive and competitive in recent years. University Entrance is no guarantee to acceptance to University, it is simply a minimum standard that must be met. Entry will be dependent on numerous factors including number of applicants for a specific course of study and the level of achievement of your NCEA results. The better the endorsement, the better are your chances of acceptance to a particular course or university. Each university may also have additional requirements for entry to specific courses. It is advisable to see the Principal's Nominee, Careers Advisor, or contact the University directly to check requirements.

Approved University Entrance Subjects:

A list of University Entrance Approved subjects can be found on the reverse of your final subject selection form.

Subject Selections

English Level 1

Overview:

Level 1 English requires students to describe and explain how texts work to create meaning. Students learn how to read a visual or written text for meaning, and show this in a clear and successful essay. Students also explore creating texts through a choice of internal exams. Speech making, creating a visual text and creative writing are some of the internals offered.

Key areas of learning offered	Oral language and performing arts, visual language, written language, research skills
Explanation	Analysis requires a more in-depth appreciation for how texts make meaning, and greater knowledge of the language features used to create the text.
Internal vs External	Internal: Yes External: Yes
Standards	Achievement Standards: Yes Unit Standards: No
Recommended prerequisites	It is helpful if the student is an independent reader.
Pathways	Senior English, media studies, university entrance and literacy development.

NCEA L1 English Intended Learning Pathways in 2021

	Module	Assessment	Brief Description
Term 1	Produce formal writing.	90053 4 credits Internal	Students choose a topic and produce their own written argument.
	Construct and deliver an oral text.	90857 3 credits Internal	Students use their argument as a basis for a speech.
Term 2	Produce creative writing	90052 3 credits. Internal	Students follow a creative writing course. They polish a piece of work produced as part of the course for submission.
	Explain significant connections across texts, using supporting evidence.	90852 4 credits Internal	Students complete independent study of how ideas work across a range of texts chosen by the student.
	Create a visual text.	90855 3 credits Internal	Students make a visual text from a choice of mediums.
Term 3	Show understanding of specified aspects of studied visual or oral texts, using supporting evidence.	90850 4 credits Internal	A full length film study and essay writing for exam.
Term 4	Revision		Revise essay writing and knowledge and understanding of the text for exams.

English Level 2

Overview:

Level 2 English looks more in depth at film and writing with an emphasis on analysis of texts. Level two builds on the skills learnt in level 1 and extends them further to encourage more independent thought in the student as they question and make links between the authors and directors works, with the world around them.

Key areas of learning offered	Oral language and performing arts, visual language, written language, research skills
Explanation	Analysis requires a more in-depth appreciation for how texts make meaning, and greater knowledge of the language features used to create the text.
Internal vs External	Internal: Yes External: Yes
Standards	Achievement Standards: Yes Unit Standards: No
University Entrance	All students entering level 2 English have the opportunity to gain University Entrance and subject endorsement. UE requires 5 Reading Credits and 5 Writing Credits.
Recommended prerequisites	An ability to meet deadlines, time and resource management and an attitude of personal ownership over their education is a must for students at this level. Students who have attained a Merit endorsement or higher at level 1 are well placed to study English at Level 2, but anyone with a range of internal and external passes at level 1 and who enjoys reading for pleasure should seriously consider English at Level 2.
Pathways	Senior English, media studies, university entrance and literacy development.

NCEA L2 English Intended Learning Pathways in 2021

	Module	Assessment	Brief Description
Term 1	Respond critically to specified aspect(s) of studied visual text(s), supported by evidence. Analyse aspects of visual and/or oral text(s) through close viewing and/or listening, supported by evidence.	91099 4 credits Reading. External 91107 3 credits Reading	Introduction to text analysis. In-depth study of text and essay writing. This lays the foundation skills and ideas for all the student lead work in the following terms.
Term 2	Produce a selection of crafted and controlled writing. Analyse significant connections across texts, supported by evidence.	91475 6 credits Writing. Internal 91104 4 credits Reading. Internal	
Term 3	Create a crafted and controlled visual and verbal text. Create and deliver crafted and controlled oral text.	91103 3 credits Internal 91102 3 credits Internal	Students choose from a range of possible internal options. They work in groups with others who have chosen the same options or independently. The deeper features of their work can come from the social, political, historical background and ideas and themes within the texts studied during Term 1.

Term 4	Revision		Revise essay writing and knowledge and understanding of the text for exams.
--------	----------	--	---

English Level 3

Overview: Level 3 English is the development of critical analysis of texts from a personal, critical and historical literary perspective. Students' assumptions and ideas are challenged through ongoing discussion, dialogue and research. We examine two texts in detail before creating our own portfolio of creative writing and formal work. There is a focus on digital and collaborative learning.

Key areas of learning offered	Critical Thinking, Oral language and performing arts, visual language, creative and formal written language, research skills & close reading skills.		
Explanation	Students will study a range of film and written texts in term 1, where key ideas of critical analysis and themes are introduced and explored. In terms 2 and 3, students choose internals that explore these ideas further either by creating their own visual, oral or written texts in response. For example they may create a portfolio of their own work as well as giving a speech or performing a monologue.		
Internal vs External	Internal: Yes	External: Yes	
Achievement vs unit standards	Achievement Standards: Yes	Unit Standards: No	
University Entrance	All students will have the opportunity to study for University entrance, Literacy credits and external exams. Exam entry decisions will be made in the middle of the year following close discussions with the student/teacher/parents and Senior Management. It is usual for students to sit an external exam.		
Recommended prerequisites	Students are expected to be independent learners, and take much more leadership of their education, which prepares them adequately for work or further study. A love of reading for pleasure is very helpful to success. Students are also expected to manage their time and personal resources to meet the heavy demands of the course. It is vital to their progress that students meet deadlines.		
Pathways	Senior English, Media Studies, Performing Arts, university entrance and literacy development.		

NCEA L3 English Intended Learning Pathways in 2021

	Module	Assessment	Brief Description
Term 1	Respond critically to specified aspect(s) of studied visual text(s), supported by evidence.	91473 4 credits External	Introduction to critical literary theory. Study of a range of texts and essay writing. This lays the foundation skills and ideas for all the student lead work in the following terms.

Term 2	Produce a selection of fluent and coherent writing which develops, sustains, and structures ideas. Respond critically to significant connections across texts, supported by evidence.	91475 6 credits Internal 91478 4 credits Internal	Students choose from a range of possible internal options. They work in groups with others who have chosen the same options or independently. The deeper features of their work can come from the social, political, historical background and ideas and themes within the texts studied during Term 1.
Term 3	Create a fluent and coherent visual text which develops, sustains, and structures ideas using verbal and visual language. Create and deliver a fluent and coherent oral text which develops, sustains, and structures ideas.	91477 3 credits Internal 91476 3 credits Internal	
Term 4	Revision		

Performance Arts Level 1-3

Overview:

This course is drawn from a possible combination of Drama, Dance, Music and/or Media Studies. Each student's programme will be based on their individual strengths in consultation with the teacher. The arts subjects explore who we are, where we have come from, and where we could go. It builds students' confidence to physically express thoughts, feelings, and desires. It draws on the richness of diverse cultures to create new works. In Performing Arts students can make connections between the real world and virtual worlds. They can use online platforms to explore their ideas and access worldwide audiences. Creating virtual characters and situations online challenges students' ability to comment on, challenge, and ultimately transform society. Students demonstrate high engagement in their learning because it allows them to have fun while taking creative risks within a safe environment. They quickly learn that they are responsible for themselves and for others.

Key areas of learning offered and Explanation	Students develop their ability and confidence to communicate in many different ways through using visual, verbal, physical, and written forms of expression. They examine the work of others – established playwrights, scriptwriters, songwriters, performers, practitioners, and directors. Through performance and process, students explore big ideas, human nature, their own humanity and identity, and social and political issues.	
Internal vs External	Internal: Yes	External: Yes
Standards	Achievement Standards: Yes	Unit Standards: No
Recommended prerequisites	An interest in textual study and a strong work ethic.	
Pathways	Senior English, Media Studies, university entrance and literacy development.	

NCEA L1- 3 Performance Arts Intended Learning Pathways in 2021

	Module	Assessment	Brief Description
Term 1 to 4	Students will choose which standards they are most interested in with the	Drama/ Music/ Dance Performance (Internals)	Level 1 AS90006 Apply drama techniques in a dramatic context. AS90002 Perform dance sequences AS91090 Perform 2 pieces of Music as a featured soloist

NCEA L1 PE**Intended Learning Pathways in 2021**

The actual course may vary from the one below depending on the student's interests, level and needs.

	Module	Assessment	Brief Description
Term 1	Give it a Go - Sports Education	AS 90962 4 credits Internal	Developing personal enjoyment and group achievement working together to participate in a variety of games and activities.
Term 2	How do I work? - Sports Education	AS 90963 4 credits Internal	Develop understanding of the function of the body as it relates to the performance of a physical activity
Term 3	Use interpersonal skills to coach an athlete or team	AS 90966 4 credits Internal	Demonstrate interpersonal skills in a group and explain how these skills impact on others.
	Plan an event - Sports Education	AS 90969 4 credits Internal	Take purposeful action to assist others to participate in Physical Activity
Term 4	Practice skills learnt over the year		Upgrade or complete any standards

NCEA L2 PE**Intended Learning Pathways in 2021**

The actual course may vary from the one below depending on the student's interests, level and needs.

	Module	Assessment	Brief Description
Term 1	Perform a physical activity in an applied setting	AS91330 4 credits Internal	Developing skills and work on improving these in a selected physical activity. This is done by developing a training programme and gaining understanding on how to implement it to see changes in your body.
	Demonstrate understanding of the application of biophysical principles to training for physical activity.	AS91329 4 credits Internal	
Term 2	Examine the significance for self, others and society of a sporting event, a physical activity, or a festival.	AS 91331 4 credits Internal	This activity requires students to choose a particular physical activity to research and then report on. Alternatively, they could select a sporting event or a festival.
Term 3	Examine the implementation and outcome(s) of a physical activity event or opportunity.	AS 91335 4 credits Internal	Students work in groups to plan and implement a physical activity event/opportunity of their choosing. They will be assessed on the implementation and outcomes.
Term 4	Practice skills learnt over the year		Upgrade or complete any standards

Science Level 1

Overview: In Science students develop the skills, attitude and values to build a foundation for understanding the world. They come to appreciate that while scientific knowledge is durable, it is also constantly re-evaluated in the light of new evidence. They learn how scientists carry out investigation and they come to see science as a socially valuable knowledge system. They learn how science ideas are communicated and to make links between scientific knowledge and everyday decisions and actions.	
Key areas of learning offered	This course enables you to gain an understanding of the world in which we live and how it works. Topics include biology, chemistry, geology, physics and astronomy. A practical investigation and research topic can be carried out in each topic.
Explanation	Biology mainly involves genetics but can include life processes and ecology. Chemistry involves atomic theory and acids and bases but can include properties, structure and changes of matter and chemistry and society. Physics deals with mechanics but can include electricity, light, sound and heat. Earth and Space science can include earth systems and astronomy
Internal vs External	Internal: Yes External: Yes
Standards	Achievement Standards: Yes Unit Standards: No
Recommended prerequisites	It is helpful if the student is an independent reader and enjoys practical work and learning new skills.
Pathways	Leads to Level 2 Earth and Space Science, Environmental Science, Horticulture, Agriculture, Biology, Chemistry and Physics

NCEA L1 Science Intended Learning Pathways in 2021

	Module	Assessment	Brief Description
Term 1	Demonstrate understanding of biological ideas relating to genetic variation	90948 4 credits External	Structure and role of DNA, inheritance, variation, cell division.
	Carry out a practical investigation in a biological context	90925 4 Credits Internal	Following Scientific Method to prove or disprove a hypothesis. Involves planning and writing up an investigation.
Term 2	Demonstrate an understanding of aspects of acids and bases	90944 4 credits External	Builds on Year 10 work on Atomic theory and acids and bases. Basic essential chemistry required for any further study.
	Carry out a chemistry investigation with direction	90930 4 credits Internal	Following Scientific Method to prove or disprove a hypothesis. Involves planning and writing up an investigation.
Term 3	Demonstrate understanding of aspects of mechanics	90940 4 credits External	Speed and motion, mass, weight, pressure and forces. Essential concepts in Physics.
	Carry out a practical physics investigation that leads to a linear mathematical relationship	90935 4 credits Internal	Following Scientific Method to prove or disprove a hypothesis. Involves planning and writing up an investigation.
Term 4	Revision to prepare for external assessments		

Horticulture Level 1

Overview:

The care, needs of and propagation of plants and how they can be used in landscaping. Students learn the needs of plants and how to care for them so they are productive – vegetables, fruit, flowers and houseplants. They will learn different methods of propagation and how to design and landscape an area with plants.

Key areas of learning offered	The course can be made up of any of the following topics. Practical agricultural or horticultural investigation and skills in horticultural production, plant propagation techniques, knowledge of horticultural plant management practices and related plant physiology, knowledge of pasture/crop management practices, livestock management practices, soil management practices, the impact on the environment of primary production management practices, design a landscape plan that reflects user requirements, knowledge of the geographic distribution of agricultural and horticultural primary production in New Zealand.
Explanation	This course will be designed based on students interests and possible career paths. It is envisaged that this will be a very practical based course.
Internal vs External	Internal: Yes External: Yes
Standards	Achievement Standards: Yes Unit Standards: No
Recommended prerequisites	An interest in growing plants and the Horticultural Industry
Pathways	Leads to Level 2 Horticulture, Biology and or Environmental Science.

NCEA L1 Horticulture Intended Learning Pathways in 2021

	Module	Assessment	Brief Description
Term 1	Propagation	AS90923 4 credits Internal	Demonstrate knowledge of basic plant propagation techniques.
Term 2	Practical applications	AS90918 4 credits Internal	Carry out a practical agricultural or horticultural investigation.
	Plant physiology and horticultural practices	AS90157 4 credits Internal AS90924 4 credits External	Demonstrate practical skills used in agricultural or horticultural production. Demonstrate knowledge of horticultural plant management practices and related plant physiology.
Term 3	Soils and growing media	AS90919 4 credits External	Demonstrate knowledge of soil management practices
	Landscaping	AS90922 4 credits internal	Design a landscape plan that reflects user requirements
Term 4	Revision to prepare for external assessments		

NCEA L2 Horticulture
Intended Learning Pathways in 2021

	Module	Assessment	Brief Description
Term 1	Propagation	AS91291 4 credits Internal	Demonstrate knowledge of advanced plant propagation techniques used for commercial production in NZ.
Term 2	Practical applications	AS91289 4 credits Internal	Carry out an extended practical agricultural or horticultural investigation.
	Plant physiology and horticultural practices	AS91292 4 credits Internal AS91290 4 credits External	Demonstrate understanding of how management practices influence plant growth and development in NZ commercial production. Demonstrate understanding of techniques used to modify physical factors of the environment for NZ plant production.
Term 3	Physical Environment	AS91298 4 credits Internal	Report on the environmental impact of the production of a locally primary product.
	Landscaping	AS912956 4 credits internal	Produce a landscape plan.
Term 4	Revision to prepare for external assessments		

Level 2 and 3 Science courses can be taken term by term depending on the students' interests and needs for their career pathway. The topics and order will depend on student choices. Courses can be a full course of internal and external Achievement Standards in a set Science or can be made up of a composition of Sciences e.g. Biology – Ecology and cell biology, Horticulture – Propagation of plants, Chemistry – ions in solution and titrations, Earth and Space Science - the atmosphere, Environmental Science - Undertake a personal action, with reflection, that contributes to a sustainable future, Physics - Nuclear physics.

Environmental Science Level 2

Overview: Education for sustainability is about learning to think and act in ways that will safeguard the future wellbeing of people and our planet. Many contexts, topics, or issues that students could explore have a connection to education for sustainability. There are opportunities in most learning areas for students to examine how the resources we use and what gets leftover affects the Earth.

Key areas of learning offered	Education for sustainability includes learning about: The environment – water, land, ecosystems, energy, waste, urban living, transportation. The interactions between the natural environment and human activities, and the consequences of these. The choices and actions we can take to prevent, reduce, or change harmful activities to the environment.
--------------------------------------	---

Explanation	Central concepts that students can develop an understanding of include: sustainability – the ability of individuals, groups, and communities to meet their needs and aspirations without compromising the ability of future generations to meet theirs. equity – respect for all life, social justice, intergenerational equity, finite resources. interdependence – biodiversity, community, cultural diversity, democracy, globalisation. responsibility for
--------------------	---

	action – taking action, informed decision-making, citizenship, consumerism, enterprise, resilience, and regeneration.
Internal vs External	Internal: Yes External: Yes
Standards	Achievement Standards: Yes Unit Standards: No
Recommended prerequisites	Level 1 Science and an interest in environmental issues
Pathways	Leads to Level 3 Environmental Science, Biology

NCEA L2 Environmental Science Intended Learning Pathways in 2021			
	Module	Assessment	Brief Description
Term 1 to 3	Students will choose which standards they are most interested in and create an individual course	AS90810 6 credits Internal AS90811 4 credits Internal AS90813 3 credits Internal AS91734 4 credits Internal AS91733 4 credits External or AS90814 4 credits External	Undertake a personal action, with reflection, that contributes to a sustainable future Explain how human activity in a biophysical environment has consequences for a sustainable future Demonstrate understanding of how different personal values have implications for a sustainable future Develop a collaborative response that promotes a sustainable future, in relation to a current issue Demonstrate understanding of initiatives that contribute to a sustainable future Develop understanding of aspects of sustainability in different contexts

Biology Level 2	
Overview: Biology is looking at living things and how they interact with each other and the environment. Students develop an understanding of the diversity of life and life processes, of where and how life has evolved, of evolution as the link between life processes and ecology and of the impact of humans on all forms of life. As a result, they are able to make more informed decisions about significant biological issues. The emphasis is on the biology of NZ and its' unique fauna and flora and distinctive ecosystems.	
Key areas of learning offered	Explore the diverse ways in which animals and plants carry out life processes. explore ecological distribution patterns and explain possible causes for these patterns. Understand that DNA and the environment interact in gene expression. Explain how the interaction between ecological factors and natural selection leads to genetic changes within populations.
Explanation	A look at life processes at the cellular level which involves microscope work. Genetic variation and change and gene expression is reinforced through practical investigations and analysing biological validity of information. Understanding of adaptations of plants or animals to their way of life and how they produce patterns in an ecological community.
Internal vs External	Internal: Yes External: Yes
Standards	Achievement Standards: Yes Unit Standards: No
Recommended prerequisites	Level 1 Science or Biology

Recommended prerequisites	Level 2 Biology or Science recommended
Pathways	Leads to careers in medicine & health, ecology, veterinary & agricultural sciences and biotechnology.

NCEA L3 Biology Intended Learning Pathways in 2021			
	Module	Assessment	Brief Description
Term 1	Human Evolution	AS91606 4 credits External	Demonstrate understanding of trends in human evolution.
Term 2	Practical investigation	AS 91601 4 credits Internal	Carry out a practical investigation in a biological context, with guidance.
	Genetic engineering or socio - scientific issues	AS 91602 3 credits Internal or AS91607 3 credits	Integrate biological knowledge to develop an informed response to a socio-scientific issue. Demonstrate understanding of human manipulations of genetic transfer and its biological implications
	Homeostasis	AS91604 3 credits Internal	Demonstrate understanding of how an animal maintains a stable internal environment
Term 3	Responses of plants and animals to their environment or Evolutionary processes leading to speciation.	AS91603 4 credits External or AS91605 4 credits External	Demonstrate understanding of the responses of plants and animals to their external environment. Demonstrate understanding of evolutionary processes leading to speciation.
Term 4	Revision to prepare for external assessments		

Chemistry Level 2	
Overview: The study of matter and the changes it undergoes. Students develop an understanding of the composition and properties of matter, the changes it undergoes and the energy involved. They use their understanding of chemistry to make sense of the world around them. They learn to interpret their observations by considering the properties and behaviour of atoms, molecules and ions and use symbols and conventions of chemistry.	
Key areas of learning offered	Atomic Structure. Bonding and shapes of molecules. Energy changes in chemical reactions, precipitates and complex ions, organic chemistry, Redox and quantitative analysis.
Explanation	Investigate and measure the chemical and physical properties of a range of groups of substances, for example, acids and bases, oxidants and reductants, and selected organic and inorganic compounds. Relate properties of matter to structure and bonding. Develop an understanding of and use the fundamental concepts of chemistry (for example, equilibrium and thermochemical principles) to interpret observations. Apply knowledge of chemistry to explain aspects of the natural world and how chemistry is used in society to meet needs, resolve issues, and develop new technologies.
Internal vs External	Internal: Yes External: Yes
Standards	Achievement Standards: Yes Unit Standards: No

Recommended prerequisites	Level 1 Science
Pathways	Leads to Level 3 Chemistry, Science and/or Earth and Space Science

NCEA L2 Chemistry
Intended Learning Pathways in 2021

	Module	Assessment	Brief Description
Term 1	Demonstrate understanding of bonding, structure, properties and energy changes.	91164 5 credits External	Builds on L1 Atomic Structure. Bonding and shapes of molecules. Energy changes in chemical reactions.
	Carry out a practical investigation into a substance present in a consumer product using quantitative analysis	91910 4 credits	Interpreting experimental observations to recognise the formation of precipitates and complex ions.
Term 2	Demonstrate understanding of the properties of selected organic compounds.	91165 4 credits External	Classifying and naming organic molecules. Identification of types of reaction.
	Carry out an investigation into chemical species present in a sample using qualitative analysis	91911 3 credits Internal	Students will carry out a titration followed by mole calculations to collect quantitative data.
Term 3	Demonstrate understanding of oxidation-reduction.	91167 3 credits Internal	Identify oxidants and reductants and write balanced half equations to describe the process of redox.
Term 4	Revision to prepare for external assessments.		

Chemistry Level 3

Overview:

The study of matter and the changes it undergoes. Students develop an understanding of the composition and properties of matter, the changes it undergoes and the energy involved. They use their understanding of chemistry to make sense of the world around them. They learn to interpret their observations by considering the properties and behaviour of atoms, molecules and ions and use symbols and conventions of chemistry.

Key areas of learning offered	Atomic structure and periodic trends, enthalpy and entropy, advanced organic chemistry, spectroscopy, Redox.	
Explanation	Investigate and measure the chemical and physical properties of a range of groups of substances, for example, acids and bases, oxidants and reductants, and selected organic and inorganic compounds. Relate properties of matter to structure and bonding. Develop an understanding of and use the fundamental concepts of chemistry (for example, equilibrium and thermochemical principles) to interpret observations. Apply knowledge of chemistry to explain aspects of the natural world and how chemistry is used in society to meet needs, resolve issues, and develop new technologies.	
Internal vs External	Internal: Yes	External: Yes
Standards	Achievement Standards: Yes	Unit Standards: No

University Entrance	Yes
Recommended prerequisites	Level 2 Chemistry
Pathways	Studying chemistry can lead to a Chemistry degree or any Science related degree. It is looked upon favourably in any career path where analytical thinking is required.

NCEA L3 Chemistry Intended Learning Pathways in 2021			
	Module	Assessment	Brief Description
Term 1	Demonstrate understanding of thermochemical principles and the properties of particles and substances	91390 5 credits External	Builds on L2 Atomic Structure and bonding. Describing periodic trends, sub shells, properties of substances. Investigating enthalpy and entropy changes in chemical reactions.
Term 2	Demonstrate understanding of the properties of organic compounds	91391 5 credits External	Builds on L2 Organic compounds. Classifying and naming organic molecules. Identification of types of reaction.
Term 3	Demonstrate understanding of spectroscopic data in chemistry Demonstrate understanding of oxidation-reduction processes.	91388 3 credits Internal 91393 3 credits Internal	Interpret and decipher spectroscopic data to correctly identify species present. Builds on oxidation-reduction at L2 with an emphasis on the application of the processes used in industry.
Term 4	Revision to prepare for external assessments.		

Earth and Space Science Level 2	
Overview: The interconnecting systems and processes of the Earth, the other parts of the solar system and the universe beyond. Students learn that Earth's subsystems of geosphere, hydrosphere, atmosphere and biosphere are interdependent and that all are important. They come to appreciate that humans can affect these systems in both positive and negative ways. This includes the numerous interactions of Earth's four systems with the solar system.	
Key areas of learning offered	This course is flexible and can cover Earth and Space science, Geology, Marine Science and Astronomy. A practical investigation in at least one of the topics will be carried out.
Explanation	Develop an understanding of the causes of natural hazards and their interactions with human activity on Earth. Explain the nature of different types of stars in terms of energy changes and time.
Internal vs External	Internal: Yes External: Yes
Standards	Achievement Standards: Yes Unit Standards: No
Recommended prerequisites	Level 1 Science
Pathways	Leads to Level 3 Earth & Space Science or Level 2 courses in Biology, Chemistry and Physics

**NCEA L2 Earth and Space Science
Intended Learning Pathways in 2021**

	Module	Assessment	Brief Description
Term 1	Astronomy	AS91192 4 credits External	Demonstrate understanding of stars and planetary systems.
Term 2	Practical	AS91187 4 credits Internal	Carry out a practical Earth and Space Science Investigation
	Extremophiles	AS91190 4 credits Internal	Investigate how organisms survive in an extreme environment.
	Geology of NZ	AS91189 4 credits Internal	Investigate geological processes in a NZ locality
Term 3	Earth systems and or extreme events - tsunami, earthquakes, volcanoes	AS91191 4 credits External or AS91193 4 credits External	Demonstrate understanding of the causes of extreme Earth events in NZ Demonstrate understanding of physical principles related to the Earth System.
Term 4	Revision to prepare for external assessments.		

Earth and Space Science Level 3

Overview:

The interconnecting systems and processes of the Earth, the other parts of the solar system and the universe beyond. Students learn that Earth's subsystems of geosphere, hydrosphere, atmosphere and biosphere are interdependent and that all are important. They come to appreciate that humans can affect these systems in both positive and negative ways. This includes the numerous interactions of Earth's four systems with the solar system.

Key areas of learning offered

Develop an in-depth understanding of the interrelationship between human activities and the geosphere, hydrosphere, atmosphere, and biosphere over time.
Explore recent astronomical events or discoveries, showing understanding of the concepts of distance and time.

Explanation

Through studying ESS, students gain an understanding of New Zealand's geology, marine environments, and weather systems. Earth scientists work in resource management, sustainable mining, environmental management, conservation, geology, marine science, and climate science.

Internal vs External

Internal: Yes

External: Yes

Standards

Achievement Standards: Yes

Unit Standards: No

University Entrance

Yes

Recommended prerequisites

Level 2 Earth and Space Science, Chemistry or Physics

Pathways	Leads to careers needing science. University entrance, polytechnic entrance, vocational training.
-----------------	--

NCEA L3 Earth and Space Science Intended Learning Pathways in 2021			
	Module	Assessment	Brief Description
Term 1		AS91415 4 credits Internal	Investigate an aspect of astronomy
Term 2 and 3	Practical Investigation Socio-scientific report Geological dating	AS91410 4 credits Internal AS91411 4 credits Internal AS91412 4 credits Internal AS91414 4 credits External AS91413 4 credits External	Carry out an independent practical Earth and Space Science investigation. Investigate a socio-scientific issue in an Earth and Space Science context Investigate the evidence related to dating geological event(s) Demonstrate understanding of processes in the atmosphere system Demonstrate understanding of processes in the ocean system
Term 4	Revision to prepare for external assessments.		

Physics Level 2	
Overview: The study of a wide range of physical phenomena, which could include light, sound, heat, electricity, magnetism, waves, forces and motion. Students gain an understanding of interactions between parts of the physical world and of the ways in which they can be represented. Knowing about physics enable people to understand a wide range of contemporary issues and challenges and potential technological solutions.	
Key areas of learning offered	This course covers nuclear physics, light, electricity, magnetism, and mechanics (forces, velocity, acceleration, momentum and energy) and generally how the world works in a physical sense.
Explanation	Investigate physical phenomena (in the areas of mechanics, electricity, electromagnetism, light and waves, and atomic and nuclear physics) and produce qualitative and quantitative explanations for a variety of unfamiliar situations; Analyse data to deduce complex trends and relationships in physical phenomena. Use physics ideas to explain a technological or biological application of physics.
Internal vs External	Internal: Yes External: Yes
Standards	Achievement Standards: Yes Unit Standards: No
Recommended prerequisites	Level 1 Science
Pathways	Physics is required for many tertiary courses, eg architecture, physiotherapy, medicine. Leads to Level 3 Physics

NCEA L2 Physics
Intended Learning Pathways in 2021

	Module	Assessment	Brief Description
Term 1	Atomic and Nuclear Physics	AS91172 3 credits Internal	Demonstrate understanding of atomic and nuclear physics.
Term 2	Mechanics Practical investigation	AS91171 6 credits External AS91168 4 credits Internal	Demonstrate understanding of mechanics. Carry out a practical physics investigation that leads to a non-linear mathematical relationship.
Term 3	Electricity and Magnetism Waves and Light Applied Physics	AS91173 6 credits External or AS91523 4 credits External AS91169 3 credits Internal	Demonstrate understanding of electricity and electromagnetism. Demonstrate understanding of wave systems. Demonstrate understanding of physics relevant to a selected context.
Term 4	Revision to prepare for external assessments.		

Physics Level 3

Overview:

The study of a wide range of physical phenomena, which could include light, sound, heat, electricity, magnetism, waves, forces and motion.

Students gain an understanding of interactions between parts of the physical world and of the ways in which they can be represented. Knowing about physics enables people to understand a wide range of contemporary issues and challenges and potential technological solutions.

Key areas of learning offered

Waves systems, Mechanical systems, Modern physics, Electrical Systems and experimental techniques.

Explanation

Investigate physical phenomena (in the areas of mechanics, electricity, electromagnetism, light and waves, and atomic and nuclear physics) and produce qualitative and quantitative explanations for a variety of complex situations; Analyse and evaluate data to deduce complex trends and relationships in physical phenomena.

Use physics ideas to explain a technological, biological, or astronomical application of physics and discuss related issues.

Internal vs External

Internal: Yes

External: Yes

Standards

Achievement Standards: Yes

Unit Standards: No

University Entrance

Yes

Recommended prerequisites

Level 2 Physics

Pathways

Careers in engineering, medicine, architecture, design, aviation and computing.

NCEA L3 Physics
Intended Learning Pathways in 2021

	Module	Assessment	Brief Description
Term 1	Modern Physics	AS91525 3 credits Internal	Demonstrate understanding of Modern Physics.
	Applied Physics	AS91522 3 credits Internal	Demonstrate understanding of the application of physics to a selected context.
Term 2	Mechanics	AS91524 6 credits External	Demonstrate understanding of mechanical systems.
	Practical investigation	AS91521 4 credits Internal	Carry out a practical investigation to test a physics theory relating two variables in a non-linear relationship.
Term 3	Electricity	AS91526 6 credits External	Demonstrate understanding of electrical systems.
	Waves	AS91523 4 credits External	Demonstrate understanding of wave systems.
Term 4	Revision to prepare for external assessments.		

Mathematics and Statistics Level 1

Overview: In Mathematics and Statistics students are learning skills that are enhancing their thinking strategies and skills, problem solving abilities, skills related to logic, sequencing, ordering, deducting, refuting and skills relating to analysing and synthesising ideas. The language of Mathematics is based on numeric and alphabetic symbols which provide the best avenue for modelling not only real life events but also the abstract ideas and concepts that higher level Mathematics is about.

Key areas of learning offered	Mathematics at Level 1 encompasses the three main branches of Number and Algebra, Geometry and Measurement, Statistics and Probability.	
Explanation	This level of study is giving students the chance to gain a wide yet solid foundation in all three areas in order to give them an educated understanding on which they can base their preferences, choices and future pathways for L2 and beyond	
Internal vs External	Internal: Yes	External: Yes
Standards	Achievement Standards: Yes	Unit Standards: No
Recommended prerequisites	Level 1 Mathematics is compulsory for all year 11 students	
Pathways	Skills gained through Mathematics are used in all academic pathways such as researcher, scientist or lecturer, and a wide variety of trades and industries. Government industries, information technology, agriculture, engineering, geology, geography, programming, architecture, design industries, defence forces and trades such as electricians, plumbers, carpenters, builders, joiners, technicians, nursing (human, animal).	

NCEA L1 Mathematics
Intended Learning Pathways in 2021

	Module	Assessment	Brief Description
Term 1	Life skills mathematics Number Measurement	AS 91026 4 credits internal AS 91030 3 credits internal	Apply Numeric reasoning in solving problems Apply measurement in solving problems
Term 2 and 3	Consolidation of a range of mathematics required for different subject areas and career pathways. Students may choose which standards best meet their needs	AS 91027 4 credits external AS 91028 4 credits external AS 91031 4 credits external AS 91029 3 credits internal AS 91032 3 credits internal AS 91033 3 credits internal AS 91034 3 credits internal AS 91038 3 credits internal	Apply algebraic procedures in solving problems Investigate relationships between tables, equations and graphs. Apply geometric reasoning in solving problems Apply linear algebra in solving problems Apply right-angled triangles in solving measurement problems Apply knowledge of geometric representations in solving problems Apply transformation geometry in solving problems Investigate a situation involving elements of chance.
Term 4	Revision to prepare for external assessments.		

Mathematics and Statistics Level 2

Overview: In Mathematics and Statistics students are learning skills that are enhancing their thinking strategies and skills, problem solving abilities, skills related to logic, sequencing, ordering, deducting, refuting and skills relating to analysing and synthesising ideas. The language of Mathematics is based on numeric and alphabetic symbols which provide the best avenue for modelling not only real life events but also the abstract ideas and concepts that higher level Mathematics is about.

Key areas of learning offered	Mathematics at Level 2 includes the study of skills necessary for higher level, more abstract problem solving and the practical applications that applied mathematics caters for.	
Explanation	At this level students still gain enough insight and practical skills for them to decide whether to follow a path with more practical elements or a path leading to scientific research based or academic pathways.	
Internal vs External	Internal: Yes	External: Yes
Standards	Achievement Standards: Yes	Unit Standards: No
Recommended prerequisites	Level 2 a pass in at least one Level 1 external exam is necessary.	
Pathways	Skills gained through Mathematics are used in all academic pathways such as researcher, scientist or lecturer, and a wide variety of trades and industries. Government industries, information technology, agriculture, engineering, geology, geography, programming, architecture, design industries, defence forces and trades such as electricians, plumbers, carpenters, builders, joiners, technicians, nursing (human, animal).	

NCEA L2 Mathematics
Intended Learning Pathways in 2021

	Module	Assessment	Brief Description
Term 1	Developing skills needed for interpretation and application of mathematics to new situations	AS 91256 2 credits Internal AS 91258 2 credits Internal	Apply coordinate geometry in solving problems Apply sequences and series in solving problems
Term 2 and 3	Consolidation of a range of mathematics required for different subject areas and career pathways. Students may choose which standards best meet their needs	AS91257 4 credits internal AS91259 3 credits internal AS91260 2 credits internal AS91264 4 credits internal AS91265 3 credits internal AS91268 2 credits internal AS91261 4 credits External AS91262 4 credits External AS91267 4 credits External	Apply graphical methods in solving problems Apply trigonometric relationships in solving problems Apply network methods in solving problems Use Statistical methods to make an inference Conduct an experiment to investigate a situation using statistical methods. Investigate a situation involving elements of chance using simulation Apply Algebraic methods in solving problems Apply calculus methods in solving problems Apply probability methods in solving problems
Term 4	Revision to prepare for external assessments.		

Mathematics and Statistics Level 3

Overview: Mathematics at Level 3 is giving students the tools and knowledge to specialise in their chosen field. Students can specialise to study in **Mathematics**, which incorporates skills relating to calculus and algebra, and **Statistics**, which incorporates skills related to data handling, analysis and inference **OR** a combination of both.

Key areas of learning offered	Mathematics at Level 3 includes the study of skills necessary for higher level, abstract problem solving and the practical applications that applied mathematics caters for.	
Explanation	Calculus involves applying and using complex numbers, conic sections, applying and use of differentiation and integration techniques on various function types. Trigonometry is the use and application of trigonometric techniques in different representations in the contexts of geometry and real life situations. Statistics involves the evaluation of statistic based reports, critique causal relationships, interpret margin of errors, make inferences, use confidence intervals and sampling variability. Probability involves use of distributions in calculating probabilities, understanding of and use of central limit theorem and related concepts, knowledge and use of combinatorics.	
Internal vs External	Internal: Yes	External: Yes
Standards	Achievement Standards: Yes	Unit Standards: No
University Entrance	Yes	
Recommended prerequisites	Level 3 a successful pass in the relevant Level 2 achievement standards is required, and a pass in Level 1 Algebra standard.	

Pathways	Mathematical skills are used in all academic pathways such as researcher, scientist or lecturer, and a wide variety of trades and industries. Government industries, information technology, agriculture, engineering, geology, geography, programming, architecture, design industries, defence forces and trades such as electricians, plumbers, carpenters, builders, joiners, technicians, nursing (human, animal).
-----------------	---

NCEA L3 Calculus Intended Learning Pathways in 2021			
	Module	Assessment	Brief Description
Term 1	Revision and developing the skills needed for interpretation and application of mathematics to new situations. Linear programming and simultaneous equations	AS 91587 3 credits internal AS 91574 3 credits internal	Apply systems of simultaneous equations in solving problems Apply linear programming methods in solving problems
Term 2 and 3	Consolidation of a range of mathematics required for different subject areas and career pathways. Students may choose which standards best meet their needs	AS 91573 3 credits internal AS 91575 4 credits internal AS 91578 6 credits External AS 91579 6 credits External AS 91577 5 credits External	Apply the geometry of conic sections Apply trigonometric methods in solving problems Apply differentiation methods in solving problems Apply integration methods in solving problems Apply the algebra of complex numbers in solving problems
Term 4	Revision to prepare for external assessments.		

NCEA L3 Statistics Intended Learning Pathways in 2021			
	Module	Assessment	Brief Description
Term 1	Revision and developing the skills needed for interpretation and application of mathematics to new situations Linear programming and simultaneous equations	AS 91587 3 credits internal AS 91574 3 credits internal	Apply systems of simultaneous equations in solving problems Apply linear programming methods in solving problems
Term 2 and 3	Consolidation of a range of mathematics required for different subject areas and career pathways. Students may choose which standards best meet their needs	AS 91580 4 credits internal AS 91581 4 credits internal AS 91582 4 credits internal AS 91583 4 credits internal AS 91584 4 credits External AS 91585 4 credits External AS 91586 4 credits External	Investigate Time Series data Investigate bivariate measurement data Use statistical methods to make a formal inference Conduct an experiment to investigate a situation using experimental design principles Evaluate statistically based reports Apply probability concepts in solving problems Apply probability distribution methods in solving problems

Term 4	Revision to prepare for external assessments.		
--------	---	--	--

History Level 1	
Overview: Level 1 History explores local, NZ, and world-wide subjects such as the Wahine Disaster and the Vietnam War. Students develop skills in evaluating evidence for reliability and usefulness in a historical context.	
Key areas of learning offered	Research, note-taking, evaluation of evidence and report writing.
Explanation	Students will cover two or more moments in history and look closely at evidence and evaluate the usefulness of the evidence. They will also be expected to complete their own research by selecting relevant information and explaining why is useful or reliable. There may also be an opportunity for students to show their understanding of two different viewpoints of an issue or event.
Internal vs External	Internal: Yes External: Yes
Standards	Achievement Standards: Yes Unit Standards: No
Recommended prerequisites	An ability to research, use APA referencing & formatting, work independently through a number of steps and write reports or essays will be important in this subject.
Pathways	History, Social Sciences, Sociology, English, Anthropology

NCEA L1 History Intended Learning Pathways in 2021			
	Module	Assessment	Brief Description
Term 1	Carry out an investigation of an historical event, or place, of significance to New Zealanders.	91001 4 credits Internal	Students research aspects of a historical event and reach conclusions about the usefulness of information found.
	Demonstrate understanding of an historical event, or place, of significance to New Zealanders.	91002 4 credits Internal	Students write a report based on their research for 91001.
Term 2	Demonstrate understanding of different perspectives of people in an historical event of significance to New Zealanders.	91004 4 credits Internal	Students use understanding of two perspectives of an event to create a piece of writing.
Term 3	Interpret sources of an historical event of significance to New Zealanders.	91003 4 credits External	An exam where students are given a source booklet from a moment in NZ history, and are asked to evaluate the sources for information, usefulness and reliability.
Term 4	Revision		Revise essay writing and knowledge and understanding of the text for exam.

Technology Levels 1 and 2 Hospitality

Overview: In Technology the emphasis is on developing practical skills. It fosters critical thinking, accuracy and a wide range of skills leading to a career or leisure activity which will enhance their lives.	
Key areas of learning offered	Students will develop skills and knowledge in food preparation, food presentation, safe food handling, food service and the hospitality industry.
Explanation	To develop students' ability within the hospitality area ,the course will allow for a large range of techniques and ideas to be explored.
Internal vs External	Internal: Yes External: No
Standards	Achievement Standards: Yes Unit Standards: Yes
Recommended prerequisites	An interest in food preparation and nutrition
Pathways	Level 2 Hospitality

Hospitality Level 1

Students can choose to do either a full or half year course in hospitality

	Module	Assessment	Brief Description
Term 1 and 2	Cookery Schools 1	US 21058 2 credits US 15900 4 credits US 15901 3 credits US 19770 2 credits	Career pathways in the hospitality industry Meat Fruit and vegetables Eggs and cheese
Term 3 and 4	Cookery Schools 2	US 15919 2 credits US 15920 2 credits US 15921 3 credits US 21059 2 credits	Hot finger food Sauce and soup Cake, sponge and scones Demonstrate knowledge of knives

Hospitality Level 2

Students can choose to do either a full or half year course in hospitality

	Module	Assessment	Brief Description
Term 1 and 2	Cookery Schools 2	US 167 4 credits US 13285 2 credits US 13276 2 credits US 13283 2 credits	Food safety Knives Grilling Salads
Term 3 and 4	Cookery Schools 4	US 13271 2 credits US 13278 2 credits US 13280 2 credits US 13281 2 credits	Frying Roasting Fruit and vegetable cuts Sandwiches

Technology Level 1

Overview:

This course is an extension of Year 10 Technology. By immersing students in the technological process it provides the opportunity to solve technological problems. Students will undertake two set projects, then with their new skills will find an issue that they can design a solution for, and build a prototype. They will then construct and evaluate their solutions to their design problems.

Key areas of learning offered	The Technology course offers students the opportunity to develop and construct solutions based on the student's individual needs. In 2019 it is proposed that courses will be offered in both metal and wood.	
Explanation	You will produce a portfolio that clearly communicate your understanding of your practical project and could include material such as: annotated photographic evidence of: a process, or processes, an outcome, or outcomes (including mock-ups and prototypes) annotated illustrations (eg computer graphics, design sketches, drawings, photographs, screenshots) written descriptions, explanations, and discussions material from research sources.	
Internal vs External	Internal: Yes	External: No
Standards	Achievement Standards: Yes	Unit Standards: Yes
Recommended prerequisites	An interest in learning new skills and processes	
Pathways	Technology levels 2 and 3	

NCEA L1 Technology Intended Learning Pathways in 2021

	Module	Assessment	Brief Description
Term 1	Chopping Board Unit Outline	AS90157 6 credits Internal	Implement basic procedures using resistant materials to make a specified product
Term 2 and 3	Prototype Outline	AS91047 6 credits Internal	Undertake development to make a prototype to address a brief
Term 4	Evidence used from the two practical projects	Unit Standard 4433 2 credits	Select, use, and care for simple measuring devices used in engineering

Technology Level 2

Overview:

This year you will be assessed using Level Two Achievement Standards which will require you to work hard in the workshop using a mixture of both practical skills and design skills to produce two quality projects. A large part of the assessment is based on your ability to produce a quality digital portfolio that is printed out and handed in. The Google Classroom is a record of all of the content that will be delivered by me this year. If you are absent, sick or fall behind you can always catch up by accessing the work on this Google Classroom.

Key areas of learning offered	You are going to produce a Google Presentation that will be printed out when finished and sent to NZQA for marking. This presentation will set out the order of slides you should have in the report and guide you on the content that you need to include within the slides.
--------------------------------------	---

Explanation	You will produce a portfolio that clearly communicate your understanding of your practical project and could include material such as: annotated photographic evidence of: a process, or processes, an outcome, or outcomes (including mock-ups and prototypes) annotated illustrations (eg computer graphics, design sketches, drawings, photographs, screenshots) written descriptions, explanations, and discussions material from research sources.	
Internal vs External	Internal: Yes	External: No
Standards	Achievement Standards: Yes	Unit Standards: Yes
Recommended prerequisites	Level 1 Technology	
Pathways	Technology levels 2 and 3	

NCEA L2 Technology Intended Learning Pathways in 2021			
	Module	Assessment	Brief Description
Term 1	Step Stool or campstove Unit Outline	AS91344 6 credits Internal	Implement advanced procedures using resistant materials to make a specified product with special features
Term 2 to 4	Own design Brief Outline Prototype Outline	AS91354 4 credits Internal AS91357 6 credits Internal	Undertake brief development to address an issue Undertake effective development to make and trial a prototype

BCITO Level 1 - 3	
Overview: An Industry based unit standard course which will develop workshop safety, hand and power tools while building the foundation skills in carpentry and joinery trades.	
Key areas of learning offered	Level 1 BCITO it is proposed that topics will include Safety, materials, Tools Level 2 BCITO is an Industry based unit standard course which will develop workshop safety, hand and power tools while building the foundation skills in carpentry and joinery trades. Topics include Safety, Building a cupboard, Materials Level 3 BCITO requires the student to be on the worksite for all US offered.
Explanation	Unit standards at level 1-3 all cover areas such as safety, hand and power tools, materials leading to making projects such as a bookshelf, saw stool, outdoor chair, bedside cabinet or other agreed upon project.
Internal vs External	Internal: Yes External: No
Standards	Achievement Standards: No Unit Standards: Yes
Recommended prerequisites	An interest in the building or carpentry trades
Pathways	Leads to careers in the building industry and Building apprenticeship

**NCEA L1 BCITO
Intended Learning Pathways in 2021**

	Module	Assessment	Brief Description
Term 1	Safety	US24352 2 credits	Demonstrate knowledge of and apply safe working practices in the construction of a BCATS project
	Materials	US24355 4 credits	Demonstrate knowledge of construction and manufacturing materials used in BCATS projects
Term 2 to 4	Projects using joints, hardware and fastenings	US25919 2 credits	Use hardware and fastenings for a BCATS project
		US25920 3 credits	Use joints for a BCATS project

**NCEA L2 BCITO
Intended Learning Pathways in 2021**

	Module	Assessment	Brief Description
Term 1	Safety	US24354 4 credits	Demonstrate knowledge of and apply safe working practices in a BCATS environment
	Tool care and use	US24350 6 credits	Identify, select, maintain, and use portable power tools for BCATS projects
Term 2 to 4	Projects using joints, hardware and fastenings	US12932 8 credits	Construct timber garden furniture and items of basic construction equipment as a BCATS project
		US25921 6 credits	Make a cupboard as a BCATS project

**NCEA L3 BCITO
Intended Learning Pathways in 2021**

	Module	Assessment	Brief Description
Term 1	Safety	US12997 3 credits	Demonstrate Knowledge of safe working practices on construction sites
	Tool care and use	US12998 4 credits	Demonstrate knowledge of carpentry hand tools
Term 2 to 4	Projects using joints, hardware and fastenings	US13000 4 credits	Demonstrate knowledge of portable power tools used on construction sites
		US13002 2 credits	Demonstrate knowledge of timber used in construction
		US24378 4 credits	Perform building calculations

Technology Level 2 Engineering - Tools 4 work

Overview: In Year 12 students taking Materials Tech will be doing a practical strand following the Unit Standards programme. Each student will develop skills when undertaking set projects, then with their new skills find an issue that they can design a solution for, and build a prototype. They will then construct and evaluate their solutions to their design problems.

Key areas of learning offered	Welding techniques; mig or arc, Fitting and turning (Lathe work), Construction techniques, Forging and metal tempering technique, Toolmaking
Explanation	Competently use workshop tools and know the processes. Competently make a range of Engineering projects. Use appropriate PPE (Personal Protective Equipment) and safety rules in a workshop. Understand the materials they are using in the workshop. Use hand and power tools. Assemble projects using welders and trade specific fasteners. Understand and interpret plans and extract the appropriate information.
Internal vs External	Internal: Yes External: No
Standards	Achievement Standards: Yes Unit Standards: Yes
Recommended prerequisites	Level 1 Technology
Pathways	Technology level 3

NCEA L2 Engineering Intended Learning Pathways in 2021

	Module	Assessment	Brief Description
Term 1		US4433 1 credit US20917 2 credits	Select, use and care for simple measuring devices used in engineering Demonstrate Basic Knowledge of Engineering Materials
Term 2 to 4		US4435 3 credits US4436 4 credits US2395 4 credits US2396 4 credits	Select, use, and care for engineering dimensional measuring equipment Select, use, and care for engineering marking-out equipment Select, Use and Care for Engineering Hand Tools Select, Use and Maintain Portable Handheld Engineering Power Tools

	Computing	Brief Description	Assessment
Term 1-4	A variety of unit standards offered at levels 1-3 depending on the student's skills and interests. Digital Technology assessment standards can also be offered if requested.	Computing is a course that covers a broad range of computing and business administration skills. Use of core computer applications, software packages, hardware, problem solving and design for publication.	Various depending on student skills and motivation
Cost None		Pathways Leads towards National Certificate in Computing Levels 2-3 and careers computing industry	Internal Unit or Achievement standards

Term 3	Produce a body of work informed by established practice, which develops ideas, using a range of media.		of two A2 folio boards, by looking at established artists' work for inspiration
Term 4	Demonstrate understanding of art works from a Maori and another cultural context using art terminology and/or Produce a finished work that demonstrates skills appropriate to cultural conventions.	90913 4 credits Internal and/or 90917 4 credits Internal	Revise essay writing and knowledge and understanding of the text for the exam. and/or This is a very flexible unit of artwork that allows students to develop skills in different conventions, for example jewellery, mural painting, or weaving .

Visual Arts Level 2			
Overview			
Students may be in mixed level classes and can choose options between Painting and Photography. or both. (Other options, eg Design, Printmaking and Sculpture are available on request)			
	Module	Assessment	Brief Description
Term 1 Paint	Demonstrate an understanding of methods and ideas from established practice appropriate to Painting.	91306	This achievement standard informs students of established practice. It assists and develops understanding and ability to analyse and extend ideas.
Photo	Demonstrate an understanding of methods and ideas from established practice appropriate to Photography..	91307 <i>and/or</i>	This achievement standard informs students of established practice. It assists and develops understanding and ability to analyse and extend ideas.
Term 1 Paint	Use drawing methods to apply knowledge of conventions appropriate to design/painting/photography or printmaking etc.	91311 4 credits Internal	Generate, develop, re-generate, clarify and extend ideas, exploring ideas around a topic/theme of their choice. Students gather information around a topic of their choice, to inform their art works. They will incorporate the Elements of Art into their work to show their understanding of these conventions.
Photo		91312 4 credits Internal	
Term 2 Paint	Develop ideas in a related series of drawings appropriate to established painting/photography/printmaking	91316 4 credits Internal	Students build on their theme by looking at connections and possibilities of development of ideas as informed by established practice. (artist models and visual inspirations) The above Internal Standards inform the body of work for the External portfolio boards.
Phot		91317 4 credits Internal	
Term 3 Paint	Produce a systematic body of art making conventions and ideas within painting/photography/printmaking	91321 12 Credits External	Students produce a portfolio of art works related to their theme, presented in the form of two A2 folio boards. Students' work is informed by established practice: developing, generating, re-generating, clarifying and extending ideas, showing understanding of art making conventions.
Phot		91322 12 credits External	
Term 4 Multi-media	Produce a resolved work that demonstrates control of skills appropriate to cultural conventions.	91325 4 credits Internal	This is an optional group/craft/community project, of choice. This can be a *mural, *jewellery, *costume, *tattoo, *film etc
		Completion of all standards	
Students may still work on completion of projects. <i>and/or</i> Any other Visual Arts Internal standards, or the research topic after the external folios are handed in.			

Visual Arts Level 3

Students need to have completed at least one Achievement Standard at Level 2 to continue with Level 3 Visual Arts. Students need to have gained credits at Merit or Excellence for their External boards at level 2, should they want to enter External folios at Level 3. Students may be in mixed level classes and can choose options between Painting and Photography, or both. (Other options, eg Design, Printmaking and Sculpture are available on request)

	Module	Assessment	Brief Description
Term 1 Paint	Analyse methods and ideas from established painting practice.	91441 4 credits Internal	Students build on their visual knowledge and processes and procedures of established practice through research and practical experience Students can do any one or more of the following pathways: Painting and Photography
Photo	Analyse methods and ideas from established photography practice.	91442 4 credits Internal	Students build on their visual knowledge and processes and procedures of established practice through research and practical experience Students can do any one or more of the following pathways: Painting and Photography
<i>And/or:</i>			
Term 1 Paint	Use drawing methods to apply knowledge of conventions appropriate to design/painting/photography or printmaking etc.	91446 4 credits Internal	Students build on their visual knowledge and processes and procedures of established practice through research and practical experience Students can do any one or more of the following pathways: Painting and Photography
Photo		91447 4 credits Internal	
Term 2 Paint	Systematically clarify ideas using drawing informed by established practice in painting or photography. Produce a systematic body of work that integrates	91451 4 credits Internal 91452 4 credits Internal	Students gather information around a topic of their choice, to inform their art works. They will incorporate the Elements of Art into their work to show their understanding of these conventions This involves producing a systematic body of work that integrates conventions and regenerates ideas within painting or photography
Photo	conventions and regenerates ideas within painting or photography.	91456/ 91457 14 credits External	
Term 3 Paint	Produce a systematic body of art making conventions and ideas within painting / photography / printmaking	91456 14 Credits External	Students produce a portfolio of art works related to their theme, presented in the form of three A2 folio boards. Students' work is informed by established practice: developing, generating, re-generating, clarifying and extending ideas, showing understanding of art making conventions.
Phot		91457 14 credits External	
Term 4 Multi-media	Produce a resolved work that demonstrates control of skills appropriate to cultural conventions.	91460 4 credits Internal	Produce a resolved work that demonstrates purposeful control of skills appropriate to cultural context
			Students may still work on completion of projects. <i>and/or</i> Any other Visual Arts Internal standards, or the research topic.

Students will have the opportunity to take Art History in 2021

Art History Levels

Overview: Studying art history starts with taking a look at the timeline of major art periods, including the artists and events that defined these movements and the evolution of art over time. It is the study of visual images and objects, including painting, drawing, sculpture, architecture, photography, design etc
 “Art History develops the skills necessary to analyse and interpret a world that is saturated with images. It provides a deeper understanding of different cultural traditions and historical periods, and teaches us the importance of creativity and the freedom of the imagination”.

Key areas of learning offered: Art History and Literacy accreditation
 University Entrance Approved

Pathways: Graduates with this degree are employed in a range of jobs across the art gallery and museum sector, in heritage management and education, as well as in more diverse fields such as journalism, events management, marketing and architecture.

Students can choose to do either a full or half year course in combination with other subjects

<p style="text-align: center;">Art History Level One Students have a choice to do Art History at Level 2 or 3 with consultation of the teacher and their Mentor</p>			
	Module	Assessment	Brief Description
Term 1	Demonstrate understanding of the subject matter of art works	91016 4 Credits' Internal	An imaginative inquiry into the choices artists make and the reason they choose certain subject matter.
Term2	Demonstrate understanding of links between context(s) and art works	91017 4 Credits Internal	Students look at and compare at least two art works and the links between them, with supportive evidence.
Term 3	Demonstrate knowledge of media and methods used to produce art works	91018 4 Credits Internal	Students are looking at how the artists create art works, and what media they use. It can be sculpture, moving image, paintings etc
Term 4	Demonstrate understanding of formal elements of art works, using art terminology	91015 4 Credits External	Students analyse art works, by identifying compositional choices and genres that artists use, by means of identifying the key elements of art in art works. (Two more Externals are available, should a student choose to do them. Which means a further 8 credits)

Alternative Pathways
NCEA Level 1-3

Correspondence - Level 1-3		Overview
Recommended entry requirement	Specific to Level and subject choice	Course selection is done through consultation with the senior dean and management. It is important that students who wish to pursue correspondence display appropriate self-discipline and management skills including good Year 10 results. Courses cover a large range of subjects not offered at school e.g., Accounting, Economics, Languages, Te Reo Maori, Home and Life Science, Horticulture and Music.
Pathways	A range of academic and career pathways specific to subject choice	
Additional Costs None	Out of Class Activities Generally no	Assessment A range of internal and externals specific to the subject

If a student fails to complete a correspondence course, they will be withdrawn and the correspondence school policy is not to allow the student to enrol in another course for two years.

Trades Academy		Overview
Recommended entry requirement	A willingness to catch up on work missed when away on block courses.	Whenua Iti Outdoors (WIO) has been delivering Trades Academy programmes since 2013. The content of each course represents the basis for an engaging and experiential learning experience. courses have deliberately been designed to appeal to students who respond well to learning in a practical environment. All WIO courses are delivered in a block course format which includes overnights, each block is typically 4 days in length. Underpinning programme content is the development of crucial personal and social development skills. Courses can be <ul style="list-style-type: none"> ● Adventure Tourism Leadership Level 2 ● Adventure Tourism Leadership Level 3 ● Manaakiu Tapoi introduction Level 2 ● Manaakiu Tapoi introduction Level 3 ● Uniformed Services Level 2
Pathways	A range of academic and career pathways specific to subject choice	
Additional Costs None	Out of Class Activities Yes	Assessment A range of internal Unit Standards

Net New Zealand can offer a wide range of subjects and levels. Students will only be considered for any of these courses, if they are self motivated, committed and organised. These courses are very expensive and will need to have a contribution from the student/parent or caregiver.

Social Science

Philosophy Levels 1 - 3

Classical Studies Levels 2 and 3

Geography Levels 1 - 3

Tourism Levels 2 and 3

History Levels 1 - 3

Media Studies Levels 2 and 3

Psychology Levels 2 and 3

Accounting Levels 1 - 3

Business Studies Levels 1 - 3

Economics Levels 1 - 3

If you want to consider one of these courses you will need to make an appointment to meet with the Principal before the end of October. Final approval to allow a student to undertake one of these courses will be given by Mr Gulley.