



# COLLINGWOOD AREA SCHOOL

## SENIOR SCHOOL COURSES

# 2022

## NCEA STUDENT HANDBOOK



Claire S

# INTRODUCTION

Tēnā koutou e ngā whānau o te kura o Aorere

We are delighted to share with you the Senior School Course Booklet for 2022. 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 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 2022

## 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

|                                |                    |  |                         |
|--------------------------------|--------------------|--|-------------------------|
| <b>Ability</b>                 | <b>+ Interest</b>  | <b>+ Occupation</b>  | <b>= Subject choice</b> |
| 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 subjectNeither 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 2022 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 2022** 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

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

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|--|---|---|---|
| U<br>N<br>I<br>V<br>E<br>R<br>S<br>I<br>T<br>Y<br><br>E<br>N<br>T<br>R<br>A<br>N<br>C<br>E | Level 3 or Higher 42 credits  |   |   |
|  | 14 credits in one<br>“approved subject”                                 | 14 credits in another<br>“approved subject” | 14 credits in another<br>“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.

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

## NCEA L1 English Intended Learning Pathways in 2022

|        | Module  | Assessment                   | Brief Description   |
|--------|---|------------------------------|---|
| Term 1 | Produce formal writing.   | 90053 4 credits<br>Internal  | Students choose a topic and produce their own written argument.   |
|        | Construct and deliver an oral text.   | 90857 3 credits<br>Internal  | Students use their argument as a basis for a speech.  |
| Term 2 | Produce creative writing  | 90052 3 credits.<br>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<br>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<br>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<br>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.

|                                      |  |                           |
|--------------------------------------|--|---------------------------|
| <b>Key areas of learning offered</b> | Oral language and performing arts, visual language, written language, research skills  |                           |
| <b>Explanation</b>                   | Analysis requires a more in-depth appreciation for how texts make meaning, and greater knowledge of the language features used to create the text.   |                           |
| <b>Internal vs External</b>          | <b>Internal:</b> Yes   | <b>External:</b> Yes      |
| <b>Standards</b>                     | <b>Achievement Standards:</b> Yes  | <b>Unit Standards:</b> No |
| <b>University Entrance</b>           | 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.   |                           |
| <b>Recommended prerequisites</b>     | 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. |                           |
| <b>Pathways</b>                      | Senior English, media studies, university entrance and literacy development.   |                           |

### NCEA L2 English Intended Learning Pathways in 2022

|        | <b>Module</b>  | <b>Assessment</b>  | <b>Brief Description</b>  |
|--------|--|--|---|
| Term 1 | Respond critically to specified aspect(s) of studied visual text(s), supported by evidence.  | 91099 4 credits<br>Reading.<br>External  | 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.  |
|        | Analyse aspects of visual and/or oral text(s) through close viewing and/or listening, supported by evidence.                       | 91107 3 credits<br>Reading   |   |
| Term 2 | Produce a selection of crafted and controlled writing.<br><br>Analyse significant connections across texts, supported by evidence. | 91475 6 credits<br>Writing. Internal<br><br>91104 4 credits<br>Reading. 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 crafted and controlled visual and verbal text.  | 91103 3 credits<br>Internal  |   |
|        | Create and deliver crafted and controlled oral text.   | 91102 3 credits<br>Internal  |   |



|        |          |  |   |
|--------|----------|--|---|
| 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.

|                                      |  |                           |
|--------------------------------------|--|---------------------------|
| <b>Key areas of learning offered</b> | Critical Thinking, Oral language and performing arts, visual language, creative and formal written language, research skills & close reading skills.   |                           |
| <b>Explanation</b>                   | 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. |                           |
| <b>Internal vs External</b>          | <b>Internal:</b> Yes   | <b>External:</b> Yes      |
| <b>Achievement vs unit standards</b> | <b>Achievement Standards:</b> Yes  | <b>Unit Standards:</b> No |
| <b>University Entrance</b>           | 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.  |                           |
| <b>Recommended prerequisites</b>     | 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.               |                           |
| <b>Pathways</b>                      | Senior English, Media Studies, Performing Arts, university entrance and literacy development.  |                           |

### NCEA L3 English Intended Learning Pathways in 2022

|        | <b>Module</b>   | <b>Assessment</b>           | <b>Brief Description</b>   |
|--------|---|-----------------------------|--|
| Term 1 | Respond critically to specified aspect(s) of studied visual text(s), supported by evidence. | 91473 4 credits<br>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.<br><br>Respond critically to significant connections across texts, supported by evidence.  | 91475 6 credits<br>Internal<br><br>91478 4 credits<br>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.<br><br>Create and deliver a fluent and coherent oral text which develops, sustains, and structures ideas. | 91477 3 credits<br>Internal<br><br>91476 3 credits<br>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.

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|--------|-------------------------|--|---|
| Term 3 | Safety & Responsibility | AS 90968 3 credits<br>Internal<br><br>AS 90964 3 credits<br>Internal | Students will gain an understanding of safe behaviour in the outdoors and practice key skills in a chosen physical activity to demonstrate quality movement |
| Term 4 | Physical performance    | Optional unit standards in chosen area                               | Students will have a chance to investigate a chosen physical interest to develop skills and expand their comfort zone.                                      |

| <b>NCEA L2 PE</b><br><b>Intended Learning Pathways in 2022</b><br><b>The actual course may vary from the one below depending on the student's interests, level and needs.</b> |  |  |  |
|---|--|--|--|
|   | <b>Module</b>  | <b>Assessment</b>  | <b>Brief Description</b>   |
| Term 1  | Physical skills and safety                                   | AS91330 4 credits<br>Internal<br><br>AS91333 3 credits<br>Internal | Students will develop skills to perform physical activities and analyse the risks involved in outdoor activities.  |
| Term 2  | Managing self and others                                     | AS 91332 4 credits<br>Internal                                     | Students explore different leadership styles, then plan and run a physical challenge to lead a group of younger students.  |
| Term 3  | Exploring opportunities and outcomes of physical activities. | AS 91335 4 credits<br>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  | Social Responsibility  | AS 91334 3 credits<br>Internal                                     | Students reflect on their ability to demonstrate social responsibility in physical activity  |

| <b>NCEA L3 PE</b><br><b>Intended Learning Pathways in 2022</b><br><b>The actual course may vary from the one below depending on the student's interests, level and needs.</b> |                                       |  |  |
|---|---------------------------------------|--|--|
|   | <b>Module</b>                         | <b>Assessment</b>  | <b>Brief Description</b>   |
| Term 1  | Quality performance and risk analysis | AS91501 4 credits<br>Internal<br><br>AS91504 3 credits<br>Internal | Students demonstrate advanced ability in physical activities and analyse risk management strategies. |
| Term 2  | The principles of leadership          | AS 91505 4 credits<br>Internal                                     | Students examine contemporary leadership principles then apply them in physical activity contexts    |



|  |  |          |  |
|--|--|----------|--|
|  |  | Internal |  |
|--|--|----------|--|

| <b>NCEA L2 OE</b><br>Intended Learning Pathways in 2022 |               |   |   |
|---|---------------|---|---|
|   | <b>Module</b> | <b>Assessment</b>   | <b>Brief Description</b>  |
| Term 1  | Moana         | L2 US 489    3 credits<br>Internal  | Develop and demonstrate safe performance of kayaking skills   |
| Term 2<br>to 4  | Whenua        | L2 US 425    3 Credits<br>Internal<br>US 426       3 Credits<br>Internal<br>US 431       3 Credits<br>Internal<br>US 20159    2 Credits<br>Internal | Develop an understanding and value for Kaitiakitanga through exploring a variety of local environments. |

| <b>NCEA L3 OE</b><br>Intended Learning Pathways in 2022 |               |  |   |
|---|---------------|--|---|
|   | <b>Module</b> | <b>Assessment</b>  | <b>Brief Description</b>  |
| Term 1  | Moana         | L3 US 19428   10 credits<br>Internal   | Prepare for and demonstrate safe performance of kayaking skills   |
| Term 2<br>to 4  | Whenua        | L3 US 46249   5 Credits<br>Internal<br>US 427        2 Credits<br>Internal<br>US 430        3 Credits<br>Internal<br>US 6143       6 Credits<br>Internal | Develop an understanding and value for Kaitiakitanga through exploring a variety of local environments. |

## Science Level 1

|  |   |
|--|---|
| <b>Overview:</b><br>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. |   |
| <b>Key areas of learning offered</b>   | 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.  |
| <b>Explanation</b>   | 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 |
| <b>Internal vs External</b>  | <b>Internal:</b> Yes <span style="float: right;"><b>External:</b> Yes</span>  |
| <b>Standards</b>   | <b>Achievement Standards:</b> Yes <span style="float: right;"><b>Unit Standards:</b> No</span>  |
| <b>Recommended prerequisites</b>   | It is helpful if the student is an independent reader and enjoys practical work and learning new skills.  |
| <b>Pathways</b>  | Leads to Level 2 Earth and Space Science, Environmental Science, Horticulture, Agriculture, Biology, Chemistry and Physics  |

### NCEA L1 Science Intended Learning Pathways in 2022

|        | Module  | Assessment                     | Brief Description  |
|--------|---|--------------------------------|--|
| Term 1 | Demonstrate understanding of biological ideas relating to genetic variation | 90948 4 credits<br>External    | Structure and role of DNA, inheritance, variation, cell division.  |
|        | Carry out a practical investigation in a biological context                 | 90925 4<br>Credits<br>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<br>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<br>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<br><br>Carry out a practical physics investigation that leads to a linear mathematical relationship | 90940 4 credits External<br><br>90935 4 credits Internal | Speed and motion, mass, weight, pressure and forces. Essential concepts in Physics.<br><br>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.

|                                      |   |                           |
|--------------------------------------|---|---------------------------|
| <b>Key areas of learning offered</b> | 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. |                           |
| <b>Explanation</b>                   | 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.  |                           |
| <b>Internal vs External</b>          | <b>Internal:</b> Yes  | <b>External:</b> Yes      |
| <b>Standards</b>                     | <b>Achievement Standards:</b> Yes   | <b>Unit Standards:</b> No |
| <b>Recommended prerequisites</b>     | An interest in growing plants and the Horticultural Industry  |                           |
| <b>Pathways</b>                      | Leads to Level 2 Horticulture, Biology and or Environmental Science.  |                           |

### NCEA L1 Horticulture Intended Learning Pathways in 2022

|        | Module   | Assessment                    | Brief Description   |
|--------|--|-------------------------------|---|
| Term 1 | Propagation  | AS90923<br>4 credits Internal | Demonstrate knowledge of basic plant propagation techniques.                                    |
| Term 2 | Practical applications<br><br>Plant physiology and horticultural practices | AS90918<br>4 credits Internal | Carry out a practical agricultural or horticultural investigation.                              |
|        |  | AS90157<br>4 credits Internal | Demonstrate practical skills used in agricultural or horticultural production.                  |
|        |  | AS90924<br>4 credits External | Demonstrate knowledge of horticultural plant management practices and related plant physiology. |



|        |  |                               |   |
|--------|--|-------------------------------|---|
| Term 3 | Soils and growing media                      | AS90919<br>4 credits External | Demonstrate knowledge of soil management practices      |
|        | Landscaping                                  | AS90922<br>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 2022**

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

|                                      |   |
|--------------------------------------|---|
| <b>Key areas of learning offered</b> | Education for sustainability includes learning about:<br>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.   |
| <b>Explanation</b>                   | Central concepts that students can develop an understanding of include:<br><b>sustainability</b> – the ability of individuals, groups, and communities to meet their needs and aspirations without compromising the ability of future generations to meet theirs. <b>equity</b> – respect for all life, social justice, intergenerational equity, finite resources. <b>interdependence</b> – biodiversity, community, cultural diversity, democracy, globalisation. <b>responsibility for action</b> – taking action, informed decision-making, citizenship, consumerism, enterprise, resilience, and regeneration. |
| <b>Internal vs External</b>          | <b>Internal:</b> Yes <b>External:</b> Yes   |
| <b>Standards</b>                     | <b>Achievement Standards:</b> Yes <b>Unit Standards:</b> No   |
| <b>Recommended prerequisites</b>     | Level 1 Science and an interest in environmental issues   |
| <b>Pathways</b>                      | Leads to Level 3 Environmental Science, Biology   |

### NCEA L2 Environmental Science Intended Learning Pathways in 2022

|             | <b>Module</b>  | <b>Assessment</b>   | <b>Brief Description</b>  |
|-------------|--|---|---|
| Term 1 to 3 | Students will choose which standards they are most interested in and create an individual course | AS90810 6 credits Internal<br>AS90811 4 credits Internal<br>AS90813 3 credits Internal<br>AS91734 4 credits Internal<br>AS91733 4 credits External or<br>AS90814 4 credits External | Undertake a personal action, with reflection, that contributes to a sustainable future<br>Explain how human activity in a biophysical environment has consequences for a sustainable future<br>Demonstrate understanding of how different personal values have implications for a sustainable future<br>Develop a collaborative response that promotes a sustainable future, in relation to a current issue<br>Demonstrate understanding of initiatives that contribute to a sustainable future<br>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.

|                                  |   |                           |
|----------------------------------|---|---------------------------|
| <b>Explanation</b>               | 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. |                           |
| <b>Internal vs External</b>      | <b>Internal:</b> Yes  | <b>External:</b> Yes      |
| <b>Standards</b>                 | <b>Achievement Standards:</b> Yes   | <b>Unit Standards:</b> No |
| <b>Recommended prerequisites</b> | Level 1 Science or Biology  |                           |
| <b>Pathways</b>                  | Leads to Level 3 Biology, university entrance, polytechnic entrance, vocational training.   |                           |

**NCEA L2 Biology**  
**Intended Learning Pathways in 2022**

|        | <b>Module</b>   | <b>Assessment</b>   | <b>Brief Description</b>  |
|--------|---|---|---|
| Term 1 | Genetic variation and change                                      | AS91157 4 credits<br>External                                     | Demonstrate understanding of genetic variation and change.  |
| Term 2 | Microscope work   | AS91160 3 credits<br>Internal                                     | Investigate biological material at the microscopic level.   |
|        | Adaptations of organisms and how they help when their survival    | AS91155 3 credits<br>Internal                                     | Demonstrate understanding of adaptation of plants and animals to their way of life.   |
|        | Practical work or analysis of information presented to the public | AS91153 4 credits<br>Internal or<br>AS91154 3 credits<br>Internal | Carry out a practical investigation in a biology context, with supervision.<br>Analyse the biological validity of information presented to the public |
| Term 3 | Applied genetics or cell biology                                  | AS91159 4 credits<br>External or<br>AS91156 4 credits<br>External | Demonstrate understanding of gene expression.<br><br>Demonstrate understanding of life processes at the cellular level                                |
|        | Field work  | AS91158 3 credits<br>Internal                                     | Investigate a pattern in an ecological community, with supervision  |
| Term 4 | Revision to prepare for external assessments                      |   |   |

## Biology Level 3

**Overview:**

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**

Understand the relationship between organisms and their environment. Explore the evolutionary processes that have resulted in the diversity of life on Earth and appreciate the place and impact of humans within these processes. Understand how humans manipulate the transfer of genetic information from

|                                  |   |
|----------------------------------|---|
|                                  | one generation to the next and make informed judgements about social, ethical, and biological implications relating to this manipulation.   |
| <b>Explanation</b>               | This course covers plant responses and animal behaviour, a detailed research project on one animal or plant, homeostasis, evolution, primate and human evolution and biotechnology. |
| <b>Internal vs External</b>      | <b>Internal:</b> Yes <b>External:</b> Yes   |
| <b>Standards</b>                 | <b>Achievement Standards:</b> Yes <b>Unit Standards:</b> No   |
| <b>University Entrance</b>       | Yes   |
| <b>Recommended prerequisites</b> | Level 2 Biology or Science recommended  |
| <b>Pathways</b>                  | Leads to careers in medicine & health, ecology, veterinary & agricultural sciences and biotechnology.   |

| <b>NCEA L3 Biology</b><br><b>Intended Learning Pathways in 2022</b> |   |   |   |
|---|---|---|---|
|   | <b>Module</b>   | <b>Assessment</b>   | <b>Brief Description</b>  |
| Term 1  | Human Evolution   | AS91606 4 credits<br>External                                     | Demonstrate understanding of trends in human evolution.   |
| Term 2  | Practical investigation   | AS 91601 4 credits<br>Internal                                    | Carry out a practical investigation in a biological context, with guidance.   |
|   | Genetic engineering or socio - scientific issues  | AS 91602 3 credits<br>Internal or<br>AS91607 3 credits            | Integrate biological knowledge to develop an informed response to a socio-scientific issue.<br>Demonstrate understanding of human manipulations of genetic transfer and its biological implications |
|   | Homeostasis   | AS91604 3 credits<br>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<br>External or<br>AS91605 4 credits<br>External | Demonstrate understanding of the responses of plants and animals to their external environment.<br>Demonstrate understanding of evolutionary processes leading to speciation.                       |
| Term 4  | Revision to prepare for external assessments  |   |   |

## Chemistry Level 2

|  |  |
|--|--|
| <b>Overview:</b><br>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. |  |
| <b>Key areas of learning offered</b>   | Atomic Structure. Bonding and shapes of molecules. Energy changes in chemical reactions, precipitates and complex ions, organic chemistry, Redox and quantitative analysis.  |
| <b>Explanation</b>   | 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. |
| <b>Internal vs External</b>  | <b>Internal:</b> Yes <span style="float: right;"><b>External:</b> Yes</span>   |
| <b>Standards</b>   | <b>Achievement Standards:</b> Yes <span style="float: right;"><b>Unit Standards:</b> No</span>   |
| <b>Recommended prerequisites</b>   | Level 1 Science  |
| <b>Pathways</b>  | Leads to Level 3 Chemistry, Science and/or Earth and Space Science   |

### NCEA L2 Chemistry Intended Learning Pathways in 2022

|        | Module   | Assessment                  | Brief Description   |
|--------|--|-----------------------------|---|
| Term 1 | Demonstrate understanding of bonding, structure, properties and energy changes.                                | 91164 5 credits<br>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<br>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<br>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<br>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.

|                                      |  |                           |
|--------------------------------------|--|---------------------------|
| <b>Key areas of learning offered</b> | Atomic structure and periodic trends, enthalpy and entropy, advanced organic chemistry, spectroscopy, Redox.   |                           |
| <b>Explanation</b>                   | 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. |                           |
| <b>Internal vs External</b>          | <b>Internal:</b> Yes   | <b>External:</b> Yes      |
| <b>Standards</b>                     | <b>Achievement Standards:</b> Yes  | <b>Unit Standards:</b> No |
| <b>University Entrance</b>           | Yes  |                           |
| <b>Recommended prerequisites</b>     | Level 2 Chemistry  |                           |
| <b>Pathways</b>                      | 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 2022

|        | <b>Module</b>   | <b>Assessment</b>           | <b>Brief Description</b>   |
|--------|---|-----------------------------|--|
| Term 1 | Demonstrate understanding of thermochemical principles and the properties of particles and substances | 91390 5 credits<br>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<br>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  | 91388 3 credits<br>Internal | Interpret and decipher spectroscopic data to correctly identify species present.   |
|        | Demonstrate understanding of oxidation-reduction processes.   | 91393 3 credits<br>Internal | 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.

|                                      |  |                           |
|--------------------------------------|--|---------------------------|
| <b>Key areas of learning offered</b> | 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.                 |                           |
| <b>Explanation</b>                   | 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. |                           |
| <b>Internal vs External</b>          | <b>Internal:</b> Yes   | <b>External:</b> Yes      |
| <b>Standards</b>                     | <b>Achievement Standards:</b> Yes  | <b>Unit Standards:</b> No |
| <b>Recommended prerequisites</b>     | Level 1 Science  |                           |
| <b>Pathways</b>                      | 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 2022

|        | <b>Module</b>   | <b>Assessment</b>   | <b>Brief Description</b>   |
|--------|---|---|--|
| Term 1 | Astronomy   | AS91192 4 credits<br>External                                     | Demonstrate understanding of stars and planetary systems.  |
| Term 2 | Practical   | AS91187 4 credits<br>Internal                                     | Carry out a practical Earth and Space Science Investigation  |
|        | Extremophiles   | AS91190 4 credits<br>Internal                                     | Investigate how organisms survive in an extreme environment.   |
|        | Geology of NZ   | AS91189 4 credits<br>Internal                                     | Investigate geological processes in a NZ locality  |
| Term 3 | Earth systems and or extreme events - tsunامي, earthquakes, volcanoes | AS91191 4 credits<br>External or<br>AS91193 4 credits<br>External | Demonstrate understanding of the causes of extreme Earth events in NZ<br>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.

|                                      |  |
|--------------------------------------|--|
| <b>Key areas of learning offered</b> | Develop an in-depth understanding of the interrelationship between human activities and the geosphere, hydrosphere, atmosphere, and biosphere over time.<br>Explore recent astronomical events or discoveries, showing understanding of the concepts of distance and time.       |
| <b>Explanation</b>                   | 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. |
| <b>Internal vs External</b>          | <b>Internal:</b> Yes <span style="float: right;"><b>External:</b> Yes</span>   |
| <b>Standards</b>                     | <b>Achievement Standards:</b> Yes <span style="float: right;"><b>Unit Standards:</b> No</span>   |
| <b>University Entrance</b>           | Yes  |
| <b>Recommended prerequisites</b>     | Level 2 Earth and Space Science, Chemistry or Physics  |
| <b>Pathways</b>                      | Leads to careers needing science.<br>University entrance, polytechnic entrance, vocational training.   |

### NCEA L3 Earth and Space Science Intended Learning Pathways in 2022

|              | Module  | Assessment  | Brief Description  |
|--------------|---|---|--|
| Term 1       |   | AS91415 4 credits<br>Internal   | Investigate an aspect of astronomy   |
| Term 2 and 3 | Practical Investigation<br>Socio-scientific report<br>Geological dating | AS91410 4 credits<br>Internal<br>AS91411 4 credits<br>Internal<br>AS91412 4 credits<br>Internal<br>AS91414 4 credits<br>External<br>AS91413 4 credits<br>External | Carry out an independent practical Earth and Space Science investigation.<br>Investigate a socio-scientific issue in an Earth and Space Science context<br>Investigate the evidence related to dating geological event(s)<br>Demonstrate understanding of processes in the atmosphere system<br>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 enables people to understand a wide range of contemporary issues and challenges and potential technological solutions.

|                                      |   |                           |
|--------------------------------------|---|---------------------------|
| <b>Key areas of learning offered</b> | 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.   |                           |
| <b>Explanation</b>                   | 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.<br>Use physics ideas to explain a technological or biological application of physics. |                           |
| <b>Internal vs External</b>          | <b>Internal:</b> Yes  | <b>External:</b> Yes      |
| <b>Standards</b>                     | <b>Achievement Standards:</b> Yes   | <b>Unit Standards:</b> No |
| <b>Recommended prerequisites</b>     | Level 1 Science   |                           |
| <b>Pathways</b>                      | Physics is required for many tertiary courses, eg architecture, physiotherapy, medicine. Leads to Level 3 Physics   |                           |

### NCEA L2 Physics Intended Learning Pathways in 2022

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

|                                      |   |                           |
|--------------------------------------|---|---------------------------|
| <b>Key areas of learning offered</b> | Waves systems, Mechanical systems, Modern physics, Electrical Systems and experimental techniques.  |                           |
| <b>Explanation</b>                   | 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.<br>Use physics ideas to explain a technological, biological, or astronomical application of physics and discuss related issues. |                           |
| <b>Internal vs External</b>          | <b>Internal:</b> Yes  | <b>External:</b> Yes      |
| <b>Standards</b>                     | <b>Achievement Standards:</b> Yes   | <b>Unit Standards:</b> No |
| <b>University Entrance</b>           | Yes   |                           |
| <b>Recommended prerequisites</b>     | Level 2 Physics   |                           |
| <b>Pathways</b>                      | Careers in engineering, medicine, architecture, design, aviation and computing.   |                           |

### NCEA L3 Physics Intended Learning Pathways in 2022

|        | Module  | Assessment                    | Brief Description   |
|--------|---|-------------------------------|---|
| Term 1 | Modern Physics                                | AS91525 3 credits<br>Internal | Demonstrate understanding of Modern Physics.  |
|        | Applied Physics                               | AS91522 3 credits<br>Internal | Demonstrate understanding of the application of physics to a selected context.                                    |
| Term 2 | Mechanics                                     | AS91524 6 credits<br>External | Demonstrate understanding of mechanical systems.  |
|        | Practical investigation                       | AS91521 4 credits<br>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<br>External | Demonstrate understanding of electrical systems.  |
|        | Waves   | AS91523 4 credits<br>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.

|                                      |   |                           |
|--------------------------------------|---|---------------------------|
| <b>Key areas of learning offered</b> | Mathematics at Level 1 encompasses the three main branches of Number and Algebra, Geometry and Measurement, Statistics and Probability.   |                           |
| <b>Explanation</b>                   | 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  |                           |
| <b>Internal vs External</b>          | <b>Internal:</b> Yes  | <b>External:</b> Yes      |
| <b>Standards</b>                     | <b>Achievement Standards:</b> Yes   | <b>Unit Standards:</b> No |
| <b>Recommended prerequisites</b>     | Level 1 Mathematics is compulsory for all year 11 students  |                           |
| <b>Pathways</b>                      | 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 2022

|                 | <b>Module</b>   | <b>Assessment</b>  | <b>Brief Description</b>   |
|-----------------|---|--|--|
| Term 1          | Life skills mathematics<br>Number<br><br>Measurement  | AS 91026 4 credits<br>internal<br><br>AS 91030 3 credits<br>internal   | Apply Numeric reasoning in solving problems<br><br>Apply measurement in solving problems   |
| Term 2<br>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<br>external<br>AS 91028 4 credits<br>external<br>AS 91031 4 credits<br>external<br>AS 91029 3 credits<br>internal<br>AS 91032 3 credits<br>internal<br>AS 91033 3 credits<br>internal<br>AS 91034 3 credits<br>internal<br>AS 91038 3 credits<br>internal | Apply algebraic procedures in solving problems<br><br>Investigate relationships between tables, equations and graphs.<br>Apply geometric reasoning in solving problems<br><br>Apply linear algebra in solving problems<br><br>Apply right-angled triangles in solving measurement problems<br>Apply knowledge of geometric representations in solving problems<br>Apply transformation geometry in solving problems<br>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.

|                                      |   |
|--------------------------------------|---|
| <b>Key areas of learning offered</b> | <b>Mathematics at Level 2</b> includes the study of skills necessary for higher level, more abstract problem solving and the practical applications that applied mathematics caters for.  |
| <b>Explanation</b>                   | 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.   |
| <b>Internal vs External</b>          | <b>Internal:</b> Yes <span style="float: right;"><b>External:</b> Yes</span>  |
| <b>Standards</b>                     | <b>Achievement Standards:</b> Yes <span style="float: right;"><b>Unit Standards:</b> No</span>  |
| <b>Recommended prerequisites</b>     | Level 2 a pass in at least one Level 1 external exam is necessary.  |
| <b>Pathways</b>                      | 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 2022

|              | <b>Module</b>   | <b>Assessment</b>   | <b>Brief Description</b>  |
|--------------|---|---|---|
| Term 1       | Developing skills needed for interpretation and application of mathematics to new situations  | AS 91256 2 credits<br>Internal<br>AS 91258 2 credits<br>Internal  | Apply coordinate geometry in solving problems<br><br>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<br>internal<br>AS91259 3 credits<br>internal<br>AS91260 2 credits<br>internal<br>AS91264 4 credits<br>internal<br>AS91265 3 credits<br>internal<br>AS91268 2 credits<br>internal<br>AS91261 4 credits<br>External<br>AS91262 4 credits<br>External<br>AS91267 4 credits<br>External | Apply graphical methods in solving problems<br><br>Apply trigonometric relationships in solving problems<br>Apply network methods in solving problems<br><br>Use Statistical methods to make an inference<br><br>Conduct an experiment to investigate a situation using statistical methods.<br>Investigate a situation involving elements of chance using simulation<br>Apply Algebraic methods in solving problems<br><br>Apply calculus methods in solving problems<br><br>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.

|                                      |  |                           |
|--------------------------------------|--|---------------------------|
| <b>Key areas of learning offered</b> | <b>Mathematics at Level 3</b> includes the study of skills necessary for higher level, abstract problem solving and the practical applications that applied mathematics caters for.  |                           |
| <b>Explanation</b>                   | <b>Calculus</b> involves applying and using complex numbers, conic sections, applying and use of differentiation and integration techniques on various function types. <b>Trigonometry</b> is the use and application of trigonometric techniques in different representations in the contexts of geometry and real life situations. <b>Statistics</b> involves the evaluation of statistic based reports, critique causal relationships, interpret margin of errors, make inferences, use confidence intervals and sampling variability. <b>Probability</b> involves use of distributions in calculating probabilities, understanding of and use of central limit theorem and related concepts, knowledge and use of combinatorics. |                           |
| <b>Internal vs External</b>          | <b>Internal:</b> Yes   | <b>External:</b> Yes      |
| <b>Standards</b>                     | <b>Achievement Standards:</b> Yes  | <b>Unit Standards:</b> No |
| <b>University Entrance</b>           | Yes  |                           |
| <b>Recommended prerequisites</b>     | Level 3 a successful pass in the relevant Level 2 achievement standards is required, and a pass in Level 1 Algebra standard.   |                           |
| <b>Pathways</b>                      | 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 2022

|              | 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<br>AS 91574 3 credits internal   | Apply systems of simultaneous equations in solving problems<br>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<br>AS 91575 4 credits internal<br>AS 91578 6 credits External<br>AS 91579 6 credits External | Apply the geometry of conic sections<br>Apply trigonometric methods in solving problems<br>Apply differentiation methods in solving problems<br>Apply integration methods in solving problems |

|        |   |                                |  |
|--------|---|--------------------------------|--|
|        |   | AS 91577 5 credits<br>External | Apply the algebra of complex numbers in solving problems |
| Term 4 | Revision to prepare for external assessments. |                                |  |

**NCEA L3 Statistics**  
**Intended Learning Pathways in 2022**

|              | <b>Module</b>  | <b>Assessment</b>  | <b>Brief Description</b>  |
|--------------|--|--|---|
| Term 1       | Revision and developing the skills needed for interpretation and application of mathematics to new situations<br>Linear programming and simultaneous equations | AS 91587 3 credits<br>internal<br><br>AS 91574 3 credits<br>internal   | Apply systems of simultaneous equations in solving problems<br><br>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<br>internal<br>AS 91581 4 credits<br>internal<br>AS 91582 4 credits<br>internal<br>AS 91583 4 credits<br>internal<br><br>AS 91584 4 credits<br>External<br>AS 91585 4 credits<br>External<br>AS 91586 4 credits<br>External | Investigate Time Series data<br><br>Investigate bivariate measurement data<br>Use statistical methods to make a formal inference<br>Conduct an experiment to investigate a situation using experimental design principles<br>Evaluate statistically based reports<br><br>Apply probability concepts in solving problems<br>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

|                                  |   |
|----------------------------------|---|
| <b>Standards</b>                 | <b>Achievement Standards:</b> Yes<br><b>Unit Standards:</b> No  |
| <b>Recommended prerequisites</b> | 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. |
| <b>Pathways</b>                  | History, Social Sciences, Sociology, English, Anthropology  |

**NCEA L1 History  
Intended Learning Pathways in 2022**

|        | <b>Module</b>   | <b>Assessment</b>           | <b>Brief Description</b>  |
|--------|---|-----------------------------|---|
| Term 1 | Carry out an investigation of an historical event, or place, of significance to New Zealanders.                         | 91001 4 credits<br>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<br>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<br>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<br>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.

|                                      |   |
|--------------------------------------|---|
| <b>Key areas of learning offered</b> | Students will develop skills and knowledge in food preparation, food presentation, safe food handling, food service and the hospitality industry. |
| <b>Explanation</b>                   | To develop students' ability within the hospitality area ,the course will allow for a large range of techniques and ideas to be explored.         |
| <b>Internal vs External</b>          | <b>Internal:</b> Yes<br><b>External:</b> No   |
| <b>Standards</b>                     | <b>Achievement Standards:</b> Yes<br><b>Unit Standards:</b> Yes   |
| <b>Recommended prerequisites</b>     | An interest in food preparation and nutrition   |
| <b>Pathways</b>                      | 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<br>US 15900 4 credits<br>US 15901 3 credits<br>US 19770 2 credits | Career pathways in the hospitality industry<br>Meat<br>Fruit and vegetables<br>Eggs and cheese  |
| Term 3 and 4 | Cookery Schools 2 | US 15919 2 credits<br>US 15920 2 credits<br>US 15921 3 credits<br>US 21059 2 credits | Hot finger food<br>Sauce and soup<br>Cake, sponge and scones<br>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<br>US 13285 2 credits<br>US 13276 2 credits<br>US 13283 2 credits   | Food safety<br>Knives<br>Grilling<br>Salads                  |
| Term 3 and 4 | Cookery Schools 4 | US 13271 2 credits<br>US 13278 2 credits<br>US 13280 2 credits<br>US 13281 2 credits | Frying<br>Roasting<br>Fruit and vegetable cuts<br>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





|             |  |  |  |
|-------------|--|--|--|
| Term 2 to 4 | Own design<br><a href="#">Brief Outline</a><br><a href="#">Prototype Outline</a> | AS91354 4 credits<br>Internal<br><br>AS91357 6 credits<br>Internal | <a href="#">Undertake brief development to address an issue</a><br><br><a href="#">Undertake effective development to make and trial a prototype</a> |
|-------------|--|--|--|

## 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.

|                                      |  |
|--------------------------------------|--|
| <b>Key areas of learning offered</b> | Level 1 BCITO it is proposed that topics will include Safety, materials, Tools<br>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<br>Level 3 BCITO requires the student to be on the worksite for all US offered. |
| <b>Explanation</b>                   | 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.  |
| <b>Internal vs External</b>          | <b>Internal:</b> Yes <span style="float: right;"><b>External:</b> No</span>  |
| <b>Standards</b>                     | <b>Achievement Standards:</b> No <span style="float: right;"><b>Unit Standards:</b> Yes</span>   |
| <b>Recommended prerequisites</b>     | An interest in the building or carpentry trades  |
| <b>Pathways</b>                      | Leads to careers in the building industry and Building apprenticeship  |

### NCEA L1 BCITO Intended Learning Pathways in 2022

|             | 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 2022

|  | 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 2022**

|             | 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

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.

|                                      |  |                            |
|--------------------------------------|--|----------------------------|
| <b>Key areas of learning offered</b> | Welding techniques; mig or arc, Fitting and turning (Lathe work), Construction techniques, Forging and metal tempering technique, Toolmaking   |                            |
| <b>Explanation</b>                   | 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.<br>Use hand and power tools. Assemble projects using welders and trade specific fasteners. Understand and interpret plans and extract the appropriate information. |                            |
| <b>Internal vs External</b>          | <b>Internal:</b> Yes   | <b>External:</b> No        |
| <b>Standards</b>                     | <b>Achievement Standards:</b> Yes  | <b>Unit Standards:</b> Yes |
| <b>Recommended prerequisites</b>     | Level 1 Technology   |                            |



|                 |   |
|-----------------|---|
| <b>Pathways</b> | <p>Visual Arts are not limited to “becoming an artist”. Visual Arts equips students with the necessary skills to face the future with creative thinking, critical analysis and observational skills which are all essential for the future.</p> <p>Visual Arts is also a university entrant subject and allows for industry training opportunities and vocational pathways.</p> |
|-----------------|---|

| <b>NCEA L1 Visual Arts<br/>Intended Learning Pathways in 2022</b> |   |  |   |
|---|---|--|---|
|   | Module  | Assessment   | Brief Description   |
| Term 1  | Use drawing methods and skills recording information using wet and dry media.   | 90914 4 credits<br>Internal  | Students use dry and wet media including pen pencils, paints and collage to create artworks around a topic of their choice.   |
| Term 2  | Use drawing conventions to develop work in more than one field of practice.   | 90915 6 credits<br>Internal  | Students choose from a range of possible internal options.<br>Students build on their theme of choice by using a variety of media, including photography, printmaking or sculpture.<br>Students generate, develop, extend, re-generate and clarify artworks around their chosen theme, being informed by established practice, working towards their external boards. |
| Term 3  | Produce a body of work informed by established practice, which develops ideas, using a range of media.  | 90916 12 credits<br>External   | Students produce artworks related to their theme, and create a body of work in the form 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<br>and/or<br>Produce a finished work that demonstrates skills appropriate to cultural conventions. | 90913 4 credits<br>Internal<br><br>and/or<br><br>90917 4 credits<br>Internal | Revise essay writing and knowledge and understanding of the text for the exam.<br><br>and/or<br><br>This is a very flexible unit of artwork that allows students to develop skills in different conventions, for example jewellery, mural painting, or weaving .  |

| <b>Visual Arts Level 2<br/>Overview</b>  |  |                                |  |
|--|--|--------------------------------|--|
| <b>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)</b> |  |                                |  |
|  | Module   | Assessment                     | Brief Description  |
| Term 1<br>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<br><br><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<br>Paint  | Use drawing methods to apply knowledge of conventions appropriate to design/painting/photography or printmaking etc. | 91311 4<br>credits<br>Internal | Generate, develop, re-generate, clarify and extend ideas, exploring ideas around a topic/theme of their choice.                                    |

|   |   |                                 |  |
|---|---|---------------------------------|--|
| Photo   |   | 91312<br>4 credits<br>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.   |
| Term 2<br>Paint   | Develop ideas in a related series of drawings appropriate to established painting/photography/printmaking | 91316<br>4 credits<br>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)<br><br>The above Internal Standards inform the body of work for the External portfolio boards.                  |
| Phot  |   | 91317<br>4 credits<br>Internal  |  |
| Term 3<br>Paint   | Produce a systematic body of art making conventions and ideas within painting/photography/printmaking     | 91321<br>12 Credits<br>External | Students produce a portfolio of art works related to their theme, presented in the form of two A2 folio boards.<br>Students' work is informed by established practice: developing, generating, re-generating, clarifying and extending ideas, showing understanding of art making conventions. |
| Phot  |   | 91322<br>12 credits<br>External |  |
| Term 4<br>Multi-media   | Produce a resolved work that demonstrates control of skills appropriate to cultural conventions.          | 91325<br>4 credits<br>Internal  | This is an optional group/craft/community project, of choice.<br><br>This can be a *mural, *jewellery, *costume, *tattoo, *film etc  |
|   |   | Completion of all standards     |  |
| Students may still work on completion of projects.<br><i>and/or</i><br>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<br>Paint | Analyse methods and ideas from established painting practice.  | 91441<br>4 credits<br>Internal              | Students build on their visual knowledge and processes and procedures of established practice through research and practical experience<br><br>Students can do any one or more of the following pathways: Painting and Photography |
| Photo           | Analyse methods and ideas from established photography practice.   | 91442<br>4 credits<br>Internal              | Students build on their visual knowledge and processes and procedures of established practice through research and practical experience<br><br>Students can do any one or more of the following pathways: Painting and Photography |
| <i>And/or:</i>  |  |   |  |
| Term 1<br>Paint | Use drawing methods to apply knowledge of conventions appropriate to design/painting/photography or printmaking etc. | 91446<br>4 credits<br>Internal              | Students build on their visual knowledge and processes and procedures of established practice through research and practical experience<br><br>Students can do any one or more of the following pathways: Painting and Photography |
| Photo           |  | 91447<br>4 credits<br>Internal              |  |
| Term 2<br>Paint | Systematically clarify ideas using drawing informed by established practice in painting or photography.              | 91451<br>4 credits<br>Internal<br><br>91452 | 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                                  |

|                       |   |   |  |
|-----------------------|---|---|--|
|                       | Produce a systematic body of work that integrates conventions and regenerates ideas within painting or photography. | 4 credits<br>Internal                     |  |
| Photo                 |   | 91456/<br>91457<br>14 credits<br>External | This involves producing a systematic body of work that integrates conventions and regenerates ideas within painting or photography   |
| Term 3<br>Paint       | Produce a systematic body of art making conventions and ideas within painting / photography / printmaking           | 91456<br>14 Credits<br>External           | Students produce a portfolio of art works related to their theme, presented in the form of three A2 folio boards.<br>Students' work is informed by established practice: developing, generating, re-generating, clarifying and extending ideas, showing understanding of art making conventions. |
| Phot                  |   | 91457<br>14 credits<br>External           |  |
| Term 4<br>Multi-media | Produce a resolved work that demonstrates control of skills appropriate to cultural conventions.                    | 91460<br>4 credits<br>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><br>Any other Visual Arts Internal standards, or the research topic.   |

## Students will have the opportunity to take Art History in 2022

| <b>Art History Levels</b>   |
|---|
| <p><b>Overview:</b> 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</p> <p>“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”.</p> |
| <p><b>Key areas of learning offered:</b> Art History and Literacy accreditation<br/>University Entrance Approved</p>  |
| <p><b>Pathways:</b> 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.</p>   |

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

| <b>Art History</b><br>Level One  |        |            |                   |
|--|--------|------------|-------------------|
| Students have a choice to do Art History at Level 2 or 3 with consultation of the teacher and their Mentor |        |            |                   |
|  | Module | Assessment | Brief Description |
|  |        |            |                   |

|        |  |                                 |  |
|--------|--|---------------------------------|--|
| Term 1 | Demonstrate understanding of the subject matter of art works                     | 91016<br>4 Credits'<br>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<br>4 Credits<br>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<br>4 Credits<br>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<br>4 Credits<br>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.<br><br>(Two more Externals are available, should a student choose to do them. Which means a further 8 credits) |

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

| <b>Humanities</b><br>Level One & Two<br>Students have a choice to do Art History at Level 2 or 3 with consultation of the teacher and their Mentor.<br>The modules below are just an indication, since students can co-design their interests and plan their topics with the teacher/s involved.(See Social Science) |   |  |   |
|--|---|--|---|
|  | Module  | Assessment                             | Brief Description   |
| Term 1   | Demonstrate understanding of the social relationship in the classical world | 91024<br>6 Credits'<br>Internal<br>Lv1 | An imaginative inquiry into the choices people made and their different relationships,              |
| Term2  | Examine the socio-political life in the classical world                     | 91017<br>4 Credits<br>Internal<br>Lv 2 | Students look at the classical world and compare it to other world or cultures (philosophy as well) |



|            |   |  |  |
|------------|---|--|--|
| Term 3/4   | Examine significance of features of works of art in the classical world   | 91201<br>4 Credits<br>External<br>Lv 2 | Students examine a period of time, eg Pompeii, Hellenistic period etc and connect the the significance of artworks and their features within a classical period or society |
| Term 3 & 4 | Students may follow an individualised programme, based on what they're interested in. A programme will be designed, to suit their needs. Eg Philosophy, History, Classical Cultures, Psychology. The individualised learning plan may include NCEA credits based on candidate's choices and preference. |  |  |

## Alternative Pathways NCEA Level 1-3

For students who fail to complete workbooks that have been ordered for them, they will be required to pay \$15 per credit and will not be able to continue this pathway the following year.

| <b>Building – Level 2-3</b>          |  | <b>Overview</b>  |
|--------------------------------------|--|--|
| <b>Recommended entry requirement</b> | An interest in the construction industry             | Students will work through the BCITO apprenticeship scheme earning Unit Standards towards a building apprenticeship. The course will cover all aspects of building including safety, hand and power tools. |
| <b>Pathways</b>                      | Level 2 – 4 study<br>Building Apprenticeship         |  |
| <b>Additional Costs</b><br>None      | <b>Out of Class Activities</b><br>Work site training | <b>Assessment</b><br>Internal: Yes                      External: No   |

| <b>Telford Polytechnic – Level 2-3</b> |   | <b>Overview</b>   |
|--|---|---|
| <b>Recommended entry requirement</b>   | Ability to be self-motivated and work independently | Telford has a well-established history of providing secondary school students with STAR learning by mail and now by video conferencing. Students are able to study a range of subjects covering agriculture, equine, forestry, apiculture, horticulture and rural business. |
| <b>Pathways</b>                        | Employment in the rural sector                      |   |
| <b>Additional Costs</b><br>None        | <b>Out of Class Activities</b><br>Gateway placement | <b>Assessment</b><br>Internal: Yes                      External: No  |

| <b>PORSE (Early Childhood programme)-Level 2-3</b> |  | <b>Overview</b>   |
|--|--|---|
| <b>Recommended entry requirement</b>               | An interest in working with young children and play centre | 20 modules of work involving a range of units focused around interacting with young children, developing understanding of developmental stages and needs and regulation requirements with the early childhood sector. |
| <b>Pathways</b>                                    | Careers in early childhood education and childcare sector  |   |

|                                 |  |  |
|---------------------------------|--|--|
| <b>Additional Costs</b><br>None | <b>Out of Class Activities</b><br>On site visits | <b>Assessment</b><br>Internal: Yes<br>External: No |
|---------------------------------|--|--|

| <b>Tourism and Travel – Level 2</b>  |  | <b>Overview</b>   |
|--------------------------------------|--|---|
| <b>Recommended entry requirement</b> | Nil  | 10 modules of work focused around geography, history, knowledge of destinations, business practices, communication skills and career progression. |
| <b>Pathways</b>                      | Careers in the travel and tourism industry |   |
| <b>Additional Costs</b><br>None      | <b>Out of Class Activities</b><br>Nil      | <b>Assessment</b><br>Internal: Yes<br>External: No  |

| <b>Gateway – Level 2-3</b>           |  | <b>Overview</b>  |
|--------------------------------------|--|--|
| <b>Recommended entry requirement</b> | An interest in the chosen career path                          | Gateway offers students structured workplace placements across varied industries and businesses. Students pursue individual learning programmes, which allow them to gain new skills and knowledge in a workplace. Students are assessed in the workplace and will also study the relevant theory to contribute to NCEA credits. Students need to gain a minimum of 20 Credits in Gateway. These credits will be sourced from providers which may include Telford, Travel, Careers & Tourism, Porse etc. |
| <b>Pathways</b>                      | Pathway into vocational employment opportunities               |  |
| <b>Additional Costs</b><br>None      | <b>Out of Class Activities</b><br>On site workplace placements | <b>Assessment</b><br>Internal: Yes<br>External: No   |

| <b>Correspondence - Level 1-3</b>    |  | <b>Overview</b>   |
|--------------------------------------|--|---|
| <b>Recommended entry requirement</b> | 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. |
| <b>Pathways</b>                      | A range of academic and career pathways specific to subject choice |   |
| <b>Additional Costs</b><br>None      | <b>Out of Class Activities</b><br>Generally no                     | <b>Assessment</b><br>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.

| <b>Trades Academy</b>                |  | <b>Overview</b>   |
|--------------------------------------|--|---|
| <b>Recommended entry requirement</b> | 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. |
| <b>Pathways</b>                      | A range of academic and career pathways specific to subject choice   |   |

|                                 |                                       |  |
|---------------------------------|---------------------------------------|--|
|                                 |                                       | Courses can be <ul style="list-style-type: none"> <li>● <b>Adventure Tourism Leadership Level 2</b></li> <li>● <b>Adventure Tourism Leadership Level 3</b></li> <li>● <b>Manaakiu Tapoi introduction Level 2</b></li> <li>● <b>Manaakiu Tapoi introduction Level 3</b></li> <li>● <b>Uniformed Services Level 2</b></li> </ul> |
| <b>Additional Costs</b><br>None | <b>Out of Class Activities</b><br>Yes | <b>Assessment</b><br>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 Gully.