

# Science Extension and Enrichment Programmes 2021



## Background

Over the past 15 years, the Science Extension and Enrichment Programmes at the New Zealand Marine Studies Centre have gained a growing reputation for delivering authentic, real-world learning experiences that are enriching and enhancing for gifted students.

Students tell us that these programmes are the greatest experiences of their lives. Parents are enthused by their children returning home motivated from their experiences, their research and the friends they have made. The programmes also provide valuable professional learning and development for teachers. They tell us that observing and sharing the experience is fascinating and strengthens their understanding of the nature of science and links to current scientific knowledge.

## Why marine science?

There are a number of clear reasons why all citizens of Aotearoa need to have an in-depth experience and understanding of the marine world. The ocean is a vital part of our identity and culture, and provides us with over half of the oxygen we breathe. We have one of the longest coastlines and largest exclusive economic zones in the world, with many marine taonga right at our doorstep. The ocean also provides for our economy through aquaculture, fisheries and marine eco-tourism. The challenges we face through climate change and pollution mean it is vital that we gain knowledge and understanding, and we are able to act as kaitiaki for our marine environment for the future well-being of our planet.

## Programme plans 2021

In 2021, we are offering 11 science extension programmes, including residential programmes. Supervised and directed by our educators, these programmes involve in-depth and wide-ranging field and laboratory experiences, as well as mentoring by postgraduate research students in a supportive and friendly environment. Like minds living and working together develop an enriching, knowledge-building community.

### Costs

The 2021 programme is offered at a reduced cost of \$10/day per participant, thanks to Ministry of Education funding for gifted learners. Residential programmes include accommodation and boat transfers to Quarantine Island. Schools will be invoiced after the student selection process is complete, and it will be up to schools to determine the allocation of those costs.

### Selection process

Due to limited capacity, allocation of places on these programmes will involve a selection process. Although some priority may be given to schools who have shown particular interest in the past, we are keen to attract new schools' involvement. Each school is expected to use at least three identification criteria to determine up to three applicants to commit fully to the relevant programme. For information on identifying giftedness please visit [gifted.tki.org.nz](http://gifted.tki.org.nz)

### Application process

Application forms are available underneath. Please make sure both forms are filled out for an applicant to ensure consideration into a programme. Application deadline is 6 weeks before programme start.

Student application form (filled out by student) - [Click here](#)

Student Profile form (filled out by teacher) - [Click here](#)

Hard copies of the applications can also be arranged via email to [portobello.marinescience@otago.ac.nz](mailto:portobello.marinescience@otago.ac.nz)  
These can be posted in the mail to: NZ Marine Science Centre, 185 Hatchery Road, Portobello, Dunedin 9014.

# Science Extension and Enrichment Programmes 2021

## Terms 1 and 2

### Year 10 Programmes

#### Making Sense of the Marine World

Open to Year 10 students who are able and enthusiastic about science, and/or gifted (not necessarily in the sciences). Programmes 1 and 2 are both residential.

Schools are offered places in either Programme 1 or Programme 2

- **Programme 1** (predominantly Otago, Canterbury, Westland, Nelson/Marlborough)

8 days Wednesday 28 April to Friday 30 April  
Thursday 27 May to Saturday 29 May  
Friday 11 June and Saturday 12 June

Maximum 25 students (up to three students per school)  
Programme cost in 2021: \$80 (\$92 inc. gst) per participant

- **Programme 2** (predominantly Otago, Westland, Southland)

8 days Wednesday 12 May to Friday 14 May  
Thursday 3 June to Saturday 5 June  
Friday 25 June and Saturday 26 June

Maximum 25 students (up to three students per school)  
Programme cost in 2021: \$80 (\$92 inc. gst) per participant

### Year 11 and 12 Programme

#### Deep Thought Expedition

Open to Year 11 and 12 students who are able and enthusiastic about science, and/or are gifted (not necessarily in the sciences). This programme is an ideal extension for those that have participated in the Year 10 programme "Making Sense of the Marine World". This is a residential programme.

5 days Tuesday 6 July to Saturday 10 July

Maximum 25 students (up to three students per school)  
Programme cost in 2021: \$50 (\$57.50 inc. gst) per participant

# Terms 3 and 4

## Year 9 Programme

### Te Ara Wai ki te Oranga

Applications close **10 October 2021 UPDATE:** Due to Covid-19, this programme has been combined with the Y10 Programme: Te Rauawa o te Pahī.

Open to Year 9 Māori students (in the Dunedin area) who are able and enthusiastic about science, and/or are gifted – not necessarily in the sciences (e.g. have strong leadership and social skills, cultural specific abilities, sporting and/or creative skills).

This programme is supported by three University of Otago departments/schools: Health Sciences (Te Tangata, Sport and Exercise Sciences (Te he Māoriora) and Marine Science (Te Taonga Moana). This is not a residential programme.

5 days | **Monday 15 to Thursday 18 of November**

Maximum 25 students (up to three students per school)  
Programme cost in 2021: \$50 (\$57.50 inc. gst) per participant

## Year 10 Programme

### Te Rauawa o te Pahī

Applications close 10 October 2021

Open to Year 10 Māori students who are able and enthusiastic about science, and/or are gifted – not necessarily in the sciences (e.g. have strong leadership and social skills, cultural specific abilities, sporting and/or creative skills). This programme is an ideal extension for those that have participated in the Year 9 programme “Te Ara Wai ki te Oranga”. This is a residential programme.

4 days | **Monday 15 to Thursday 18 of November**

Maximum 25 students (up to three students per school)  
Programme cost in 2021: \$60 (\$69 inc. gst) per participant

## Year 11 and 12 Programme

### Rangatahi o te Moana

Applications close 12 July 2021

Open to Year 11 and 12 students who are able and enthusiastic about science, and/or are gifted – not necessarily in the sciences (e.g. have strong leadership and social skills, cultural specific abilities, sporting and/or creative skills). This programme is an ideal extension for those that have participated in the Year 10 programme “Te Rauawa o te Pahī”. This is a residential programme.

5 days | **Monday 9 August to Friday 13 August**

Maximum 25 students (up to three students per school)  
Programme cost in 2021: \$50 (\$57.50 inc. gst) per participant

# New Programmes

## Year 9-10 Programme

### Moana Explorers: Stories of Change - **NEW**

Open to Year 9 and 10 pasifika students who are able and enthusiastic about science, and/or are gifted – not necessarily in the sciences (e.g. have strong leadership and social skills, cultural specific abilities, sporting and/or creative skills). This programme is an ideal extension for those that have participated in the primary programme “Mapu Kimi-Ara Pasifika”. This is not a residential programme.

3 days | **Wednesday 5 May to Friday 7 May**

Maximum 25 students (up to three students per school)

Programme cost in 2021: Free of charge thanks to the Ministry of Education

# Nelson Programme

## Year 9-10 Programme

### Aquanauts: Spying on the Depths - **NEW**

Applications close **15 August 2021**

Open to Year 9 and 10 students (in the Nelson Area), who are able and enthusiastic about science, and/or gifted – not necessarily in the sciences (e.g. have strong leadership and social skills, cultural specific abilities, sporting and/or creative skills).

5 days | **Monday 18 to Friday 22 October**

Maximum 25 students (up to three students per school)

Programme cost in 2021: \$50 (\$ 57.50 inc. gst per participant)

# Primary Programmes

## Year 6, 7 and 8 Programmes

### Science and the Sea

#### Programme Rescheduled Due to Covid-19 Lockdown in August/September

Open to Year 6, 7 and 8 students (in the Dunedin Area, who are able and enthusiastic about science, and/or gifted – not necessarily in the sciences (e.g. have strong leadership and social skills, cultural specific abilities, sporting and/or creative skills). This is not a residential programme.

4 days | **New Dates: 16th, 21st, 23rd, and 30th of September**

Maximum 25 students (up to three students per school)  
Programme cost in 2020: \$40 (\$46 inc. gst) per participant

### Mapu Kimi-Ara Pasifika (Dunedin)

#### Applications close: 16 September

Open to Year 6, 7 and 8 Pasifika students (in the Dunedin Area), who are able and enthusiastic about science, and/or gifted – not necessarily in the sciences (e.g. have strong leadership and social skills, cultural specific abilities, sporting and/or creative skills). This is not a residential programme.

4 days | **Dates: Thursday 28 Oct, 4th, 11th, 18th of November**

Maximum 25 students (up to three students per school)  
Programme cost in 2021: **Free of charge thanks to the Ministry of Education**

### Mapu Kimi-Ara Pasifika (Oamaru) - **NEW**

#### Rescheduled for Term 4: Dates TBC

Open to Year 6, 7 and 8 Pasifika students (in the Oamaru Area), who are able and enthusiastic about science, and/or gifted – not necessarily in the sciences (e.g. have strong leadership and social skills, cultural specific abilities, sporting and/or creative skills). This is not a residential programme.

3 days | **Dates to TBC**

Maximum 25 students (up to three students per school)  
Programme cost in 2021: **Free of charge thanks to the Ministry of Education**

# Customised Programmes

We are now also accepting 2021 bookings for requested customised science enrichment programmes from individual schools and clusters (1, 2 or 3 days). Examples of customised programmes below:

## Year 10 Programme

### Making Sense of the Marine World Aids Survival and Enriches Lives

Introduction to key abiotic parameters of the marine world via senses and instruments. Exploring field data gathering, boat-based and shore-based. Nature of teams, nature of science, higher order thinking in experimental design and practice, critique and communication. (1, 2 or 3 days)

## Year 7 and 8 Programme

### Biomimicry

Tackling human obstacles by looking into the natural world. Students will be challenged to come up with their own solutions while exploring physiological, morphological and behavioural adaptations of marine species. Science skills and tools; team research challenge. (1 or 2 days)

## Year 9 to 12 Programme

### The Litmus test

Exploration and enquiry into climate change in the marine world with particular focus on ocean acidification. (1 or 2 days)

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For further information or any queries please contact:

**NZ Marine Studies Centre**

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