



Secondary programmes

Marine Discoveries for Schools

Join scientists and wildlife at the NZ Marine Studies Centre

Get hands-on with live species, work in University laboratories and get access to local marine coastlines. In 2024, the NZ Marine Studies Centre offers both onsite and online programmes to support Secondary learning.

For further details phone 03 479 5826
or see our website: www.marine.ac.nz



Secondary Programmes 2024

Our programmes are hands-on and designed to captivate learners and immerse them in scientific thinking and doing. Programmes align with NZ curriculum standards in Biology, and Earth and Space Science and some programmes can be combined to make full-day field trips.

Online Meeting with a Marine Scientist

All our programmes can be supported either partly or fully by distance, allowing students to engage with our scientists. Examples are: i) support for data analysis and interpretation of 3.1 achievement standards in Science, ii) Live dissection and feedings for demonstrations of adaptations (relevant to form and function in biology), and iii) live induction in a Marine Metre Squared survey so students are equipped to carry one out themselves. \$60 (GST excl.) per hour.

Marine Plastics, from Micro to Macro – levels 5-8

Investigate ocean currents and anthropogenic impacts through a survey of ocean litter, where data collected feeds directly into the NZ waste legislation. Provides students with the training, equipment and technology to take part as 'Citizen Scientists' in the Litter Intelligence Project. This programme can be done either in Portobello or taken to your schools' local coastline area. Price dependent on location – contact us for a quote. *Can provide either formative or summative assessment for A.S. 91188, A.S 91411, A.S. 91602 and A.S. 90926.*

Mighty Molluscs or Crabs Galore – Levels 5-7

What set of adaptations identify a taxonomy and how do variations to these relate to a species' survival in particular niches? Classify molluscs or crustaceans, investigate how they feed and survey the intertidal zone to compare the distribution of their species. *3 hrs. \$12 per student (GST excl.) and supports A.S. 90925 and A.S. 91155.*

Intertidal Investigation – Levels 6-8

Investigate adaptations of marine species and community structure on the rocky shore using appropriate sampling techniques either as a practice (formative) or final (summative) assessment for NCEA. Links well with Diversity in Form & Function for a full-day programme. Links to citizen science via the Marine Metre Squared project. *3hrs. \$ 12 per student (GST excl.) and can provide either formative or summative assessment for A.S. 91158.*

Diversity in Form and Function – Levels 6-8

A comparative study to look at structure and function in relation to survival in particular niches. Adaptations observed and demonstrated with living examples. Laboratory series of comparative dissections. Focus is flexible depending on teachers' requirements: respiration/gas exchange, feeding/nutrition, or reproduction/life histories. Supports learning for NCEA. Links well with Intertidal Investigation for a full-day programme. *3 hrs. \$12 per student (GST excl.). \$2 per student (GST excl.) for dissection. Supports A.S. 91155 and A.S. 91605*

Behaviour of Marine Life – Levels 6-8

Investigate the behaviour of marine animals in response to abiotic and biotic environmental factors. Living examples of symbioses, predator/prey adaptations, reproductive strategies and biological clocks. Laboratory series of mini investigations with live examples of taxes and kineses. *3 hrs. \$12 per student (GST excl.) and supports A.S. 91603.*

Small Animal Study – Levels 6-8

Carry out a practical investigation in a biological context. Focus on one animal species and investigate aspects of its ecological niche and its behaviour in response to abiotic and biotic factors. Design and carry out individual student investigations. Under guidance, students do practical work and data collection. Includes support with reference materials and bioethics. *3 days approx. \$76.00 per student (GST excl.) and provides the core work for achieving A.S. 91601.*

Ocean Acidification – Levels 6-8

Carry out a practical investigation in an Earth and Space Science context. Focus on abiotic changes of a future ocean (pH and/or temperature) and investigate the potential physical, ecological, or behavioural impacts. Design and carry out individual student investigations. Under guidance, students do practical work and data collection to meet the needs of NCEA. Includes support with reference materials and bioethics. *3 days approx. \$76.00 per student (GST excl.) and provides the core work for achieving A.S. 91410.*

Secondary Science Extension and Enrichment Programmes

Customised science enrichments programmes, perfect for Accelerated or GATE classes from individual schools or groups. An example of a customised programme: *Yr 9 & 10 (1-3 days) - "Ocean Technology" Introduction to key abiotic parameters of the marine world via senses and instruments. Exploring boat-based and/or shore-based fieldwork and data gathering via underwater robotics.* Programmes are developed with the teacher and can cater to both Mathematics and Statistics, Technology, and Science (Nature of Science, + Earth and Space Science). *1-3 days \$5.50 per student/hr (GST excl.).*

Please note: the prices quoted are for NZ schools only and do not include GST. We are happy to adapt these programmes for other interested groups.