EDUCATION PROGRAMMES AT THE OTAGO MUSEUM

www.otagomuseum.nz/learn



THE LEOTC SERVICE IS SUPPORTED BY THE MINISTRY OF EDUCATION.

For bookings, contact the Education Team. Telephone: 03 474 7470 Fax: 03 477 5993 Email: education@otagomuseum.nz Visit our website: www.otagomuseum.nz for downloadable activities and programme information. Like Otago Museum on Facebook.



If your topic is not here please ask, as a further range of programmes is available. Tell us your study objectives, learning outcomes and key competencies, and we will focus our programmes to suit.

A small materials charge may apply to some programmes. Titles, dates and content are subject to change. Please phone or email for details.

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EDUCATION AT OTAGO MUSEUM

Kia ora tātou,

We are excited to present our range of hands-on LEOTC education programmes aimed to support classroom teaching and student learning needs.

As well as our many social sciences, science and outreach programmes, we are able to tailor programmes to your learners' needs. We require only your learning outcomes and intentions, and six to eight weeks' notice. Please contact us for more information.

We look forward to working with you this year.

Ngā mihi nui,

Kate, Emily and Sam – OM Education team

Nathalie, Amadeo and Claire - OM Science Engagement team

LEOTC GALLERY PROGRAMMES



ANCIENT EGYPTIAN LIFE AND MUMMIFICATION

Who is wrapped in cloth, wears a mask and has lived at Otago Museum for over 100 years? How has science helped us to discover what she looked like and how she lived, over 1000 years ago? Meet our Egyptian mummy and explore ancient Egyptian artefacts, traditions and beliefs in the afterlife.

Curriculum Links Social Sciences: Identity, Culture and Organisation; Continuity and Change Levels 1–5

No charge

ART OF THE PACIFIC

From tapa in Samoa to the decorative arts of Māori culture, art in the Pacific is full of symbolism and stories. Engage your students with our world-renowned collection items and inspire their creativity in the optional tapa-making workshop.

Curriculum Links

Social Sciences: Identity, Culture and Organisation; Continuity and Change

Visual Arts: Understanding Visual Arts in Context; Communicating and Interpreting in Visual Arts; Developing Ideas in Visual Arts Levels 1–5

Gallery programme - No charge

Optional tapa-making workshop \$2 per student

BICULTURAL NEW ZEALAND

Explore the bicultural foundation of our nation in four iconic galleries. Who were the first settlers to arrive in New Zealand, why did they travel here, and how did they influence their new home? Learn about the world of the Māori and early European settlers, how they influenced the land and how the land influences them.

Curriculum Links

Social Sciences: Identity, Culture and Organisation; Continuity and Change Levels 1–5

CLASSICAL LIFE

The Ancient Greeks and Romans have left footprints all around the world and today we are still intrigued. Using gallery artefacts for inspiration, take a stroll in the sandals of a citizen to explore the classical way of life and its influence on us today.

Curriculum Links

Social Sciences: Identity, Culture and Organisation; Continuity and Change Levels 1–5

No charge

INVENTORS AND INVENTIONS

Behind every great invention is a great problem. Get to the root of some inventions that have influenced civilisation, starting with the plough. Explore the innovative ways of others and let your students test their creative skills with a futuristic challenge in Tūhura.

Curriculum Links

Social Sciences: Economic World; Continuity and Change Technology: Nature of Technology Levels 1–5

\$6.00 per child; 1 adult free per 6 students; further adults \$10.00 each

MAHIKA KAI

Journey through our Southern Land, Southern People and Tāngata Whenua galleries to discover the practices associated with mahika kai (food gathering). Explore the links between knowledge of the past and archaeological evidence, and get hands-on with our set of food-gathering tools in order to learn more about the lifeways of the southern Māori.

Curriculum Links

Social Sciences: Identity, Culture and Organisation; Continuity and Change Technology: Nature of Technology Levels 1–5

No charge

MĀORI TECHNOLOGY

Explore the range of taoka in the Tāngata Whenua gallery to identify resources that shaped life in early Aotearoa. Investigate how technologies enabled southern Māori to survive in this harsh land. Take a close look at our range of tools and discover the skills that went into their creation.

Curriculum Links

Social Sciences: Identity, Culture and Organisation; Continuity and Change Technology: Nature of Technology

Levels 1–5

MĀORI ART AND MUSIC

Discover the richness of Māori culture as you experience art and music in the unique setting of the Tāngata Whenua gallery. Design and embellish a hūhū (bullroarer) in the optional hands-on workshop.

Curriculum Links

Social Sciences: Identity, Culture and Organisation; Continuity and Change Music: Communicating and Interpreting; Understanding in Context Visual Arts: Communicating and Interpreting; Understanding in Context Technology: Nature of Technology Levels 1-5

Gallery programme - no charge Optional hūhū workshop – \$2 per student

TE TIRITI O WAITANGI

Travel back in time to the early days of Aotearoa and discover the stories behind the signing of our nation's founding document. Learn about the authors and find out why the Māori and Pākehā understandings of the treaty were so different. Explore this special period in New Zealand's history with inspiration from Tāngata Whenua and Southern Land, Southern People galleries.

Curriculum Links

Social Sciences: Identity, Culture and Organisation; Continuity and Change Levels 1-5

No charge

THE WORLD OF EXPLORERS

Humans are a curious bunch! Share in the wonder of discovery and the trepidation of challenges as we follow in the footsteps of inspirational explorers who have helped shape our world. Just what does it take to make a mark in the world of exploration?

Curriculum Links

Social Sciences: Economic World; Continuity and Change Levels 1–5





AMAZING ANIMALS

Clamber your way up to Animal Attic to learn about the animals of our world. Learn the basics of taxonomy and how to identify the characteristics that set one class of animal from another.

Curriculum Links

Science: Living world Levels 1–5

No charge

ANATOMY AND LIFE PROCESSES

Look deep inside the human body with a visit to the Tūhura Science Centre. Find out what lies beneath our skin at the Virtual Body Table, and see how life processes keep us and the living things around us alive in Animal Attic. Curriculum Links Science: Living World Levels 3–5

\$6.00 per student; 1 adult free per 6 students, further adults \$10.00 each

CLIMATE CHANGE

Explore the science behind global warming by examining the influence of climate change on our oceans and the possible impacts for the species with which we share our world. Curriculum Links Science: Living world Social Sciences: Place and Environment Levels 3-5

\$6.00 per student; 1 adult free per 6 students; further adults \$10.00 each

ENERGY AND FORCES

Explore the Tūhura Science Centre to investigate how everyday phenomena such as force, motion, sound, heat, electricity and magnetism shape our existence. Catapult your students into an all-encompassing programme or allow us to generate a more specific focus on the phenomena of your choice.

Curriculum Links

Science: Physical World Technology: Nature of Technology Levels 1–5

\$6.00 per student; 1 adult free per 6 students; further adults \$10.00 each

FANTASTIC FOSSILS

Delve deep into the remains of prehistoric life with New Zealand's largest fossil in the Southern Land, Southern People gallery. Your students will explore the processes of palaeontology to gain a greater appreciation of the fossil record and what it can tell us about life on planet Earth.

Curriculum Links

Science: Planet Earth and Beyond; Living World Levels 1–5

No charge

GEOLOGY ROCKS

Learn about the rock cycle in the iconic Southern Land, Southern People gallery. Look within the globe to learn about the events happening beneath our feet that shaped our world and created the geology of the land. Explore the characteristics of sedimentary, metamorphic and igneous rocks with reference to the Otago Museum geology collection, and learn about the links between geological processes and the formation of fossils.

Curriculum Links

Science: Planet Earth and Beyond Levels 1–5

No charge

MINIBEASTS

Explore the miniature life forms that live in your backyard as you uncover the secret world of minibeasts. Explore what separates and links minibeasts to the rest of the Animal Kingdom and take away a new appreciation for the little creatures that make our lives possible. Inspire your students further with our optional Tūhura module based in the Biozone and Tropical Forest.

Curriculum Links

Science: Living World Levels 1-3

No charge or \$6.00 per student; 1 adult free per 6 students; further adults \$10.00 each

NATURE'S FORCE

Mother Nature is a powerful force, but just what triggers the Earth to shake, rattle and roll? Explore the structure of the Earth and the natural phenomena of earthquakes, tsunamis and volcanoes. Explore these natural disasters through scientific exploration in our safe but exciting laboratory environment. Take things to the next stage with our optional module that uses the earth science interactives in Tūhura to bring learning alive.

Curriculum Links

Science: Planet Earth and Beyond; Physical World Levels 1-4

No charge or \$6.00 per student; 1 adult free per 6 students; further adults \$10.00 each

SCIENCE OF LIGHT

Illuminate young minds with hands-on explorations of light energy and technologies in the Tūhura Science Centre. Discover the properties of these phenomena and explore how bright scientific minds have mastered light to help us in our daily lives.

Curriculum Links

Science: Physical World Levels 3–5

\$6.00 per student; 1 adult free per 6 students; further adults \$10.00 each

SUSTAINABLE NEW ZEALAND

The world is changing and so are we. With inspiration from Nature and Southern Land, Southern People galleries, students will seek to balance the needs of humans with their impacts on the environment. Use your problem-solving skills to unravel issues associated with the impact of industry on the natural environment.

Curriculum Links

Science: Planet Earth and Beyond; Living World Social Sciences: Place and Environment; Economic World Levels 1–5

No charge

THE WORLD OF BUTTERFLIES

Delicate and colourful, butterflies captivate and astound us. How do these creatures carry out their short but busy lives? Visit the Tūhura Science Centre's Tropical Forest to explore the adaptations and relationships that butterflies have evolved to move, feed and live in their unique environment.

Curriculum Links

Science: Living world Levels 1-2

\$6.00 per student; 1 adult free per 6 students; further adults \$10.00 each

TROPICAL ECOSYSTEMS

Students will explore the flora and fauna of Otago Museum's very own rainforest. Investigate the unique relationships between the forest's residents and learn how organisms adapt and survive in this fascinating ecosystem.

Curriculum Links

Science: Living World Social Sciences: Place and Environment Levels 3–5

\$6.00 per student; 1 adult free per 6 students, further adults \$10.00 each

WILD OTAGO

Jump, swim, dive, waddle or fly into our Nature gallery to explore the wild animals of Otago. Delve into the vast and varied habitats of our region and identify solutions to modern dangers that threaten their existence. Curriculum Links Science: Living World Social Sciences: Place and Environment Levels 3–5

REACH FOR THE STARS PROGRAMMES IN THE PERPETUAL GUARDIAN PLANETARIUM



EARTH ORIGINS

Travel back in time to the birth of our solar system to learn about the forces that have shaped the planet we call home. Learn about the ways the Earth was formed and the chain reaction that led to the development of life, from single-celled organisms through the rise and fall of the dinosaurs.

Curriculum Links

Science: Planet Earth and Beyond; Living World Levels 2–5

MĀORI MYTHS AND LEGENDS

Explore Māori legends from a new perspective in the Perpetual Guardian Planetarium. Hear about the stories that Māori saw in the stars, including an examination of the celestial bodies associated with the Māori New Year, Puaka and Matariki.

MYTHS AND LEGENDS OF THE CLASSICAL WORLD

Become immersed in the night sky through the eyes of the ancient civilisations. Learn about the stories related to the celestial bodies as told by the ancient peoples of Egypt, Greece and Rome. Curriculum Links Science: Planet Earth and Beyond Social Sciences: Identity, Culture and Organisation

Levels 1–5

Curriculum Links

Science: Planet Earth and Beyond Social Sciences: Identity, Culture and Organisation Levels 1–5

OUR PLACE IN SPACE

Visit the state-of-the-art Perpetual Guardian Planetarium and put the universe within your students' reach. Become immersed as we explore the celestial bodies of our solar system and the phenomena that make our universe what it is. Curriculum Links Science: Planet Earth and

Beyond; Physical World **Social Sciences:** Place and Environment Levels 1–5

Topics include:

- The sun and the solar system
- The phases of the moon
- The life cycle of stars
- Māori and Greek constellations

The Perpetual Guardian Reach for the Stars programme supports the attendance of school students in the Otago region. This includes subsidised entry for all schools and a travel subsidy for decile 1–5 schools.

HIGH SCHOOL PROGRAMMES



ASTROBIOLOGY

Could life exist on other planets? Explore our solar system's habitable zone and beyond with a visit to the Perpetual Guardian Planetarium.

This programme is specifically designed to support the Year 13 Earth and Space Science assessment standard 3.6, with a focus on life on other planets.

Curriculum Links

Science: Planet Earth and Beyond NCEA Level 3

ASTRONOMICAL CYCLES

Engage students with a visit to the immersive environment of the Perpetual Guardian Planetarium. Explore a range of astronomical cycles including the rotation of the Earth, the Earth's orbit around the sun, the moon's orbit around the Earth, and the influence of the Earth's tilt on seasonal changes. Curriculum Links Science: Planet Earth and Beyond; Living World NCEA Level 1

EARTH ORIGINS

Travel back in time to the birth of our solar system to learn about the forces that have shaped the planet we call home. Learn about the ways the Earth was formed and the chain reaction that led to the development of life, from single-celled organisms through the rise and fall of the dinosaurs.

Curriculum Links

Science: Planet Earth and Beyond; Living World Levels 4–5

EVOLUTION

Travel back in time to explore the evolution of mankind. Enhance your students' understanding of trends in human cultural evolution through hands-on interaction with the tools of our early forefathers. Examine a range of hominid skulls and piece together our biological evolution.

This programme is specifically designed to support the Biology 3.6 external assessment, although it can be tailored to complement the specific learning outcomes of your study.

Curriculum Links

NCEA Geography: Contemporary Issues NCEA Geography: Global Studies NCEA Biology NCEA Science NCEA Levels: 1–3

MARS

Get up-close and personal with the fourth rock from the sun in the Perpetual Guardian Planetarium. Discover what makes the 'Red Planet' so appealing as a potential new home for members of the human race. Learn about the scientists who have helped us discover more about Mars and the orbiters, landers and rovers that are providing us with knowledge about our celestial neighbour.

This programme is specifically designed to support the Year 13 Earth and Space Science assessment standard 3.6, with a focus on life on other planets.

Curriculum Links Science: Planet Earth and Beyond NCEA Level 3

SPACE EXPLORATION

Travel through the solar system to explore the known universe in the Perpetual Guardian Planetarium. See the spacecraft that have helped us learn more about our celestial neighbours from the rocky inner planets to the gas giants of the outer solar system and beyond. Curriculum Links Science: Planet Earth and Beyond NCEA Level 1

THE LIFE OF STARS

Stars have inspired people for centuries, with the intricate patterns they appear to create in the night sky. Get a closer look as we explore their birth, life and death across the millennia. From white dwarves to super giants, stars have a fascinating story to tell.

This programme has specifically been developed to support the Year 12 standard 2.6 (AS91192) Demonstrate understanding of stars and planetary systems (external, 4 credits). **Curriculum Links**

Science: Planet Earth and Beyond NCEA Level 2

VISUAL ARTS

Looking for some out-of-the-classroom inspiration? From the antiquities of Ancient Greece and Rome to the traditional and contemporary designs of Pasifika and New Zealand, there is no shortage of visual motivation at the Otago Museum.

Whether your focus is on ceramics, printmaking, sculpture, carving, design or colour, your students will experience cultural artefacts in a way that will spark their imaginations and extend their understanding.

Curriculum Links

NCEA Visual Arts NCEA Levels: 1–3

The Perpetual Guardian Reach for the Stars programme supports the attendance of school students in the Otago region. This includes subsidised entry for all schools and a travel subsidy for decile 1-5 schools.

OUTREACH PROGRAMMES



OUTREACH PROGRAMMES

Outreach programmes are delivered by our Education or Science Engagement teams at your school. The programmes are structured around two formats, a **show** or a **workshop**.

Shows provide an introduction to the topic. These performances are designed to inspire and excite students. Shows are suited for a full class or school assembly and run for about 20 to 30 minutes.

Workshops provide extension on the topic and focus on hands-on interaction and learning. They can happen after the show in smaller class groups. Workshops run for about 45 to 60 minutes, depending on your class needs and level.

Charges for each programme are provided below. Please be advised, transportation costs may apply for distances over 20 km, and charges may apply for overnight visits, if applicable.

WHAT IS SCIENCE

Show: Learn about the scientific method as you use your five senses. See sound, smell taste and learn to trust your senses!

Workshop: Feel the cold of liquid nitrogen and the heat of holding bubbles of fire.

Curriculum Links Science: Nature of Science Levels 1–5

Show – no charge Workshop – \$3 per student

EXTREME SCIENCE (PHYSICS)

Show: Discover the most extreme temperatures as we freeze marshmallows with liquid nitrogen and hold burning stardust.

Workshop: Freeze your breath with liquid nitrogen and take part in making some extreme fiery explosions.

Curriculum Links Science: The Physical World Levels 1–5

Show – no charge Workshop - \$3 per student

KITCHEN CHEMISTRY

Show: From making ice cream to baking a cake, learn about the chemical and physical changes that take place right in your kitchen.

Workshop: Compare making ice cream with liquid nitrogen or ice and salt and make sparkling drinks with dry ice.

Curriculum Links Science: The Living World Levels 1-5

Show – no charge Workshop – \$3 per student

THE TREE OF LIFE (BIOLOGY)

Show: Discover how animals have adapted to different environments, and evolved to survive in our constantly changing planet.

Workshop: Create a history of life timeline as we explore adaptations since the Cambrian explosion.

Curriculum Links Science: The Living World Levels 1–5

Show – no charge Workshop – \$3 per student

NATURE'S HAZARDS [GEOGRAPHY]

Show: Aotearoa is an active geological area. Let's explore landslides, tsunamis, earthquakes and volcanoes.

Workshop: Make your own earthquake putty and simulate volcanic eruptions with dry ice.

Curriculum Links

Science: Planet Earth and Beyond Levels 1-5

Show – no charge Workshop – \$3 per student

SPACE EXPLORATION (ASTRONOMY)

Show: Travel from Earth to the edge of the universe to discover the sky.

Workshop: Make your own baking soda and vinegar rocket to take home. Rocket science is not that difficult really.

Curriculum Links

Science: Planet Earth and Beyond; The Material World Levels 1–5

Show – no charge Workshop – \$3 per student

ANCIENT EGYPTIAN LIFE AND MUMMIFICATION (CULTURE)

Show: Enter Starlab to learn about the first mummy and see the constellations of the Ancient Egyptians.

Workshop: Take part in a mummification ceremony with your classmates.

Curriculum Links Social Sciences: Time, continuity and change Levels 2-4

Show – \$100 per half-day, \$200 per full day

Workshop - free

LAY OF THE LAND (GEOLOGY)

Show: Enter Starlab to view our Earth as never before. Explore tectonic plates and volcanic activity to discover how the Earth's crust affects us.

Workshop: Handle the fossils of ancient species and learn about the effects of geology on the world around us. Focus can include fossils and natural disasters.

Curriculum Links

Science: Planet Earth and Beyond Levels 1–3

Show – \$100 per half-day, \$200 per full day

Workshop - free

STARLAB (ASTRONOMY)

Show: Enter Starlab to explore the southern night sky. Learn about the sun and moon, and the stories behind the constellations.

Curriculum Links

Science: Planet Earth and Beyond Levels 1–3

Show – \$100 per halfday, \$200 per full day

BUG CENSUS

Show: Get up close with arthropods and learn about the life cycle of the little creatures we share our world with.

Workshop: Hit the playground to conduct a survey of the invertebrates that live at your school. Take things to the next level, by including observations of other species like birds and predators.

Curriculum Links

Science: Living World; Nature of Science Levels 1-4

SLEEPOVERS



\$45 per student, \$35 per adult

NIGHT AT THE MUSEUM SLEEPOVER

Enjoy a sleepover in the Tühura Science Centre as part of your school camp or as an experience on its own. Combining an exciting range of Education programmes with mind-challenging fun in Tühura Science Centre and its Tropical Forest, our team can adapt the sleepover programme to fit your class needs.

CREATIVE WRITING SLEEPOVER FOR SENIORS

Journey across continents and through time to capture authentic details for creative writing exploits. Gain inspiration from the galleries of the Otago Museum as your students spend an afternoon, night and morning absorbing the surroundings and producing creative masterpieces. Curriculum Links NCEA English Levels 5-8

\$45 per student, \$35 per adult

SUPER SCIENCE SLEEPOVER FOR SENIORS

Get inspired by science with a night at the Museum. Based in the Tūhura Science Centre, students will be taught the basics of science communication with reference to our world-class science displays and interactives. Students will be challenged to share their knowledge by presenting their learning to the class.

Curriculum Links

NCEA Science Levels 5–8 \$45 per student, \$35 per adult

Please note, a minimum of 15 students and a maximum of 50 students and adults may apply for Sleepovers at Otago Museum. Please contact us if your group will be outside these numbers.

TAILORED PROGRAMMES

Can't quite find what you're looking for? If you send us your learning outcomes and intentions and give us at least six weeks' notice, we can tailor a programme for your class on the topics below:

- Asian Culture
- Clothing and textiles
- Cultures of New Zealand
- Earth and space sciences
- Māori and New Zealand history
- Pacific culture
- Technology
- The classical world
- The living world

Open daily, 10am–5pm Closed Christmas Day

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