

EARTH & ENVRIONMENTAL SEMESTER PROGRAMMES 2020

September 2020

WHAT IS FRONTIERS ABROAD?

Our aim is for you to have a lifechanging experience in Aotearoa (New Zealand) and return home with a road map for your future!





NOT YOUR TYPICAL STUDY ABROAD

- •Learning Earth and Environmental Science in the New Zealand outdoors with local experts
- •An emphasis on student Wellbeing through adventure, challenge, community engagement, reflection, and personal growth
- •Performing authentic research with an academic mentor
- •Discovering different ways of knowing including Mātauranga Māori
- •Connecting, sharing, engaging with local communities through academic pursuits
- •Frontiers Abroad has a family-like atmosphere

Kaikoura Township in the foreground with the Seaward Kaikoura Ranges in the background, South Island

"Frontiers Abroad can take you as someone with not too much experience, as a background, and supply you with the tools that you need in order to succeed."

OUR PROGRAMMES

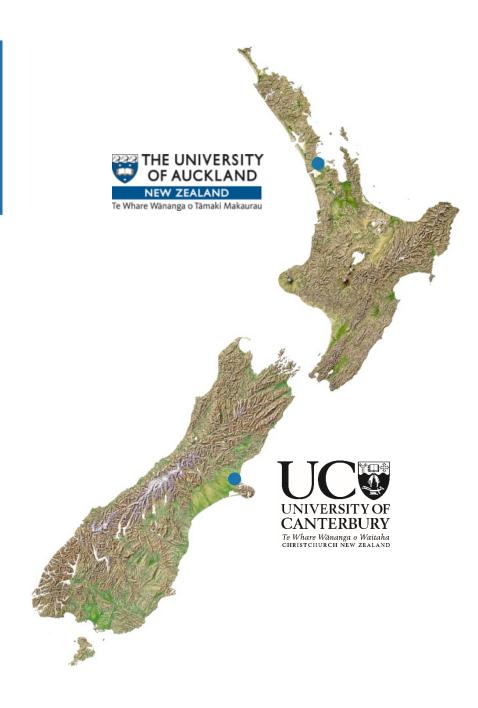
Coupled Field Camp and Campus Semester Programmes

- University of Canterbury, Christchurch, South Island
- University of Auckland, Auckland, North Island

Two Programmes to choose from:

- Geology / Earth Science
- Earth Systems / Environmental Science





PROGRAMME STARTS WITH FIELD CAMP

Objectives

- Build breadth through different disciplinary field modules
- Build and develop your field skills
- •Observe, record, interpret, reflect
- Work in teams
- Challenge yourself
- •Learn how to perform field research
- •Grow as a person





GEOLOGY FIELD CAMP (5 WEEKS)

FUNDAMENTALS

Field notes
Descriptions
Observations
Measurements
Field mapping

VOLCANOES

Lava flow fields
Super volcanoes
Geothermal
Geohazards
Quantitative Data

MAPPING

Tectonics - Structure
Stratigraphy
Geomorphology
Professional Geologic map

GEOMORPHOLOGY

Geomorphic mapping
Deformation
Processes
Timing
Landscapes

RESEARCH

Projects
Mentors
Self-directed
Data collection



VOLCANOES MODULE- TONGARIRO (MT. DOOM)

- •Field observations to interpretation
- •Eruption processes
- Volcanic hazards and eruption simulation exercise
- Integrated with students from New Zealand





EARTH SYSTEMS FIELD CAMP (4 WEEKS)

KAITIAKITANGA

Maori - World view
Observations
Field notes
Communities
Ecology

COMMUNITY

FIELD SKILLS

Environmental -

restoration

Natural hazards

Resource

management

Engagement
Reflection
Culture
Research

HYDROSPHERE

Hydrology
Chemistry
Data analysis
NZ issues
Source to Sink

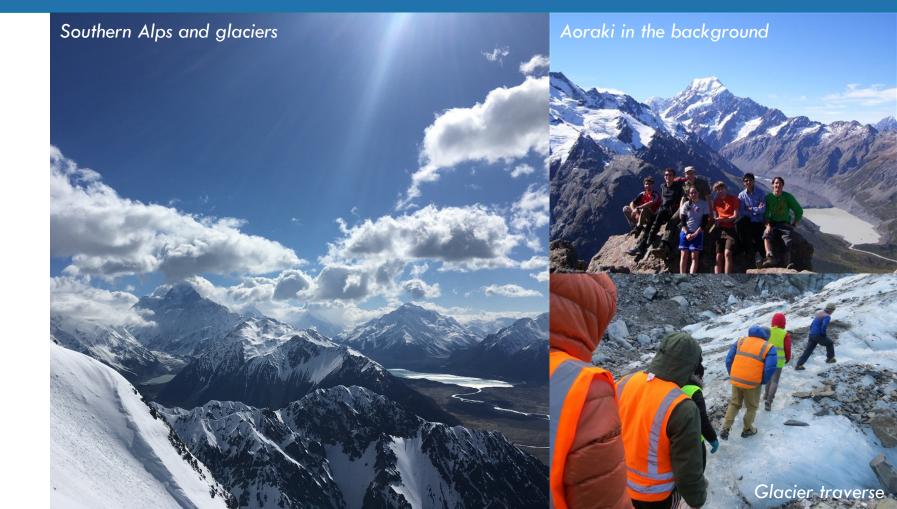
ANTHROSPHERE

Glaciers
Climate
Tourism
Sustainability
Challenges



ANTHROSPHERE MODULE— CLIMATE CHANGE AND CONSERVATION AT AORAKI / MT COOK

- •Intersecting spheres of the Earth system
- Anthropogenic climate change
- Sustainable tourism
- •Cultural significance
- Conservation strategies





CAMPUS LIFE

- •Live on / near campus at University housing
- •Choose courses from a complete University course catalogue
- •Take our Frontiers Abroad crafted research course
- Join University social & recreation clubs
- Make Kiwi mates
- Pastoral care and support

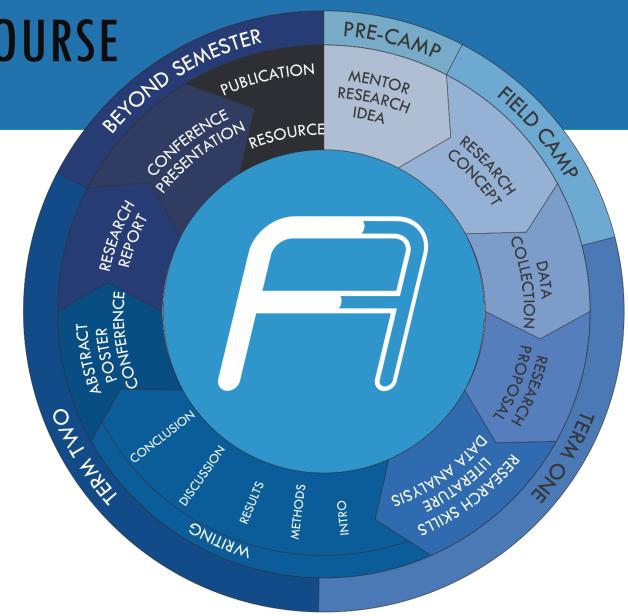




SEMESTER — RESEARCH COURSE

Our Research Learning Model:

- •'Longitudinal learning' (from the field to the classroom/laboratory)
- •Inquiry-driven/scientific method
- •Being part of a research team
- Communication Science (presentation skills)
- Manuscript/Report production
- Kick start your career (academic, industry, NGO, government)



CONFERENCES — GSA

- Oral presentation
- Poster presentation
- Networking
- •Career
- Alum events
- •Over a hundred student presentations
 - 2019 17 students
 - 2018 14 students
 - 2017 16 students

"I think that having come to New Zealand and studied with Frontiers Abroad it definitely gave me a leg up when I went to apply for jobs. Because most students coming from undergraduate careers don't really have this field research and this field experience that I got here."



FA STUDENTS PUBLISH!!

frontiers

in Marine Science





Sedimentary and geochemical signature of the 2016 Kaikōura Tsunami at Little Pigeon Bay: A depositional benchmark for the Banks Peninsula

Shaun Williams **, Tianran Zhang be, Catherine Chagué ad, James Williams *, James Goff d, Emily M. Lane *, region, New Zealand Johen Bind ^a, Ilyas Qasim ^a, Kristie-Lee Thomas ^a, Christof Mueller ^a, Sam Hampton ^a, Josh Borella ^a

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- School of Environment, Facul.
 GNS Science, PO Box 30-368,

undated Little Pigeon Bay in Banks Peninsula, New Zealand, and left wed Little Prigeon Bay in Banks Peninsula, New Zealand, and Jert

"thin the cottage near the shore. Sedimentary (grain size) and

"all analyses on samples collected over successive field

"thon observed in the cottage in combination ARTICLE I the cottage in community on within the building were predomither than from offshore. Salinity
and 12.5 m farther inland Ecological Engineering Watershed-scale prioritization of habitat restoration sites for non-point source

ARTICLEINFO

tion tool

.omatı nonitorir. G.M. Lewis ab., S.J. Hampton

Thermal Imaging and Biometrical

Travis W. Horton^{**}, Alice Oline[‡], Nan Hauser[‡], Tasnuva Ming Khan[‡], Amelie Laute[‡], Alyssa Stoller[‡], Katherine Tison[‡] and Peyman Zawar-Reza[‡]

Determining species' distributions through time and space remain-

in cetacean science and conservation, For example, many ·

of kilometers every year between remote seasonal her

that cross major shipping lanes and intensively -

spatial and temporal context that consfachnological advances enabling -

Thermography of Humpback Whales

Computers & Geosciences

Visualizing volcanic processes in SketchUp: An integrated geo-educa-tion tool

NEW ZEALANIO ZOURNAL OF MARINE AND FRESHNATER RESEARCH 2018, VOL. 52, NO. 4, 643-656

PERSONAL WELLBEING- HAVING FUN WHILE LEARNING

- Academic rigour but in a relaxed 'kiwi' style learning environment
- Reflective learning approaches
- Make life-long friends
- Family environment





PERSONAL WELLBEING- STAY ACTIVE (BODY & MIND)

- Local hiking
- Local climbing and bouldering gyms
- •Frontiers Abroad Yoga, Pilates and Mindfulness sessions
- Weekly social rugby sessions and go to Professional Rugby match
- •Getting out on the weekends!!



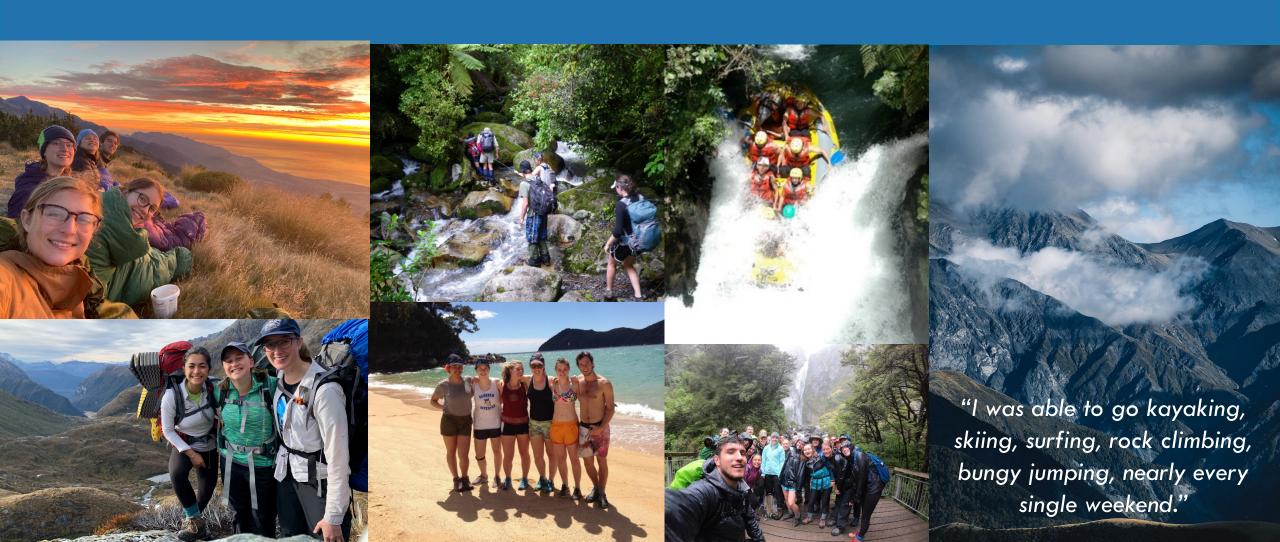
COMMUNITY & CULTURAL INTEGRATION

- Community & Cultural events (volunteering, engagement)
- Making a difference in the environment and climate (native tree planting events)
- •Getting out and enjoying festivals and meeting Kiwis!!





CHALLENGE YOURSELF- EXPLORE - GROW



HOW TO APPLY TO FRONTIERS ABROAD

Online at frontiersabroad.com

- Head to our Apply Now page
- •Complete our online form

Contact us:

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darren@frontiersabroad.com



