



2023 Frontiers Abroad Orientation Guide

Welcome to Frontiers Abroad's Geology of New Zealand and New Zealand Earth Systems Study Abroad Programmes.

We look forward to your arrival and hope you are ready to begin an incredible study abroad experience. Our borders have recently opened so we are so excited to have you arrive in New Zealand.

To better prepare you for your arrival we have prepared this orientation guide. In it you will find items you will need in New Zealand, our general itinerary, health and safety information, general COVID health and safety information and information for your parents/guardians.

We certainly hope we are at the end of the pandemic, however, Frontiers Abroad and The University of Canterbury are prepared if COVID resurges while you are in New Zealand. We are capable of offering a hybrid (remote + in person learning) while you are in New Zealand.

Our policies, rules and regulations will be sent in an accompanying document, Please carefully read over the contract of responsibilities (accompanying document) and hazards section and make sure you understand that circumstances may arise that will interrupt the programme.

In addition, please look over the material and if you or your parents have any questions or concerns please contact me or Max immediately. We hope to provide you with a safe and academically challenging study abroad experience in some of the most incredible field areas in the world. Please read and sign the Contract of Responsibility (accompanying document). Please return these forms to Max.

Thank you for choosing Frontiers Abroad and we look forward to seeing you soon!

Darren Gravley
FA Director

Important Notes:

1. COVID -- During in country orientation (Day 1) we will provide COVID related protocols for field camp. In addition, we will be using your housing at the University of Canterbury as a hub for field camp. If you do test positive for COVID, this will enable you to have the space needed for isolation and a team to support you. You will be able to complete field modules remotely in case you miss field days.
2. Mental Health – Field camp is physically and mentally challenging. You will be living with 20-25 other students in close quarters. There is less personal space and free time than you are accustomed to. During field camp we will not have regular cell/WIFI service. You may not have access to mental health services you are accustomed to. If you need mental health support during field camp you will need to have a support plan in place – developed by your mental health support team.
3. While on campus during field camp you are responsible for your own meals. There are several grocery stores in walking distance to your apartments. We also encourage you to purchase snacks for field camp if you are a “grazer” and have special treats you like!

Section 1 - Geology & ES Field Camp Itinerary**Geology Field Camp**

For 4 weeks, students will travel throughout New Zealand visiting the South and North Islands, deciphering the geologic evolution of New Zealand from a series of linked field modules. This is a field camp experience with the goal of providing students with a skill base of field focused techniques that will enable them to understand the fundamental causes and timescales of geologic processes. Fieldwork is complemented by map preparation and exercises in the evenings, as well as lectures that highlight a wide variety of our staff’s field and laboratory-based studies.

During field camp you stay in field stations and lodges. Typically, you will be sharing a room with 3-4 other students. While in the field, meals (3) are provided for you. **While you are on campus (between modules and during the research week) you are responsible for your own meals.**

Field Module 1: Jan 22- Jan 26th***Introduction to Geologic Field Observations, Field Mapping Techniques and Igneous, Metamorphic and Sedimentary Rocks, Westport New Zealand*****Lodging: Westport Field Station**

Field module 1 introduces the major rock types (igneous, sedimentary, metamorphic) in the field, relationships between rock types, and rock-forming processes. The module is based on the principles of in-field training utilizing and developing basic field mapping skills such as compass work, making and recording observations (field note taking), sketching, and interpretations. In this module you will learn basic field mapping skills, including the compilation of a detailed stratigraphic column and small geological map of a coastal exposure.

Field Module 2: Jan 28- Feb 3rd***Geomorphic and Bedrock Mapping of the Castle Hill Basin*****Lodging: Cass Field Station, Arthurs Pass, Southern Alps**

This module examines the geology and surficial deposits of Castle Hill basin, located in the eastern foothills of the Southern Alps, inland Canterbury. This part of the course will build upon your field mapping skills and include the compilation of a larger geologic map with geologic contacts, key structures, stratigraphy, and geomorphic features. Geologic mapping of the basin relies on the complex folding best expressed by a middle Tertiary limestone unit. You will develop an understanding of both the structural and geomorphic evolution of the basin, and associated deformation and periods of Quaternary glaciation.

Field Module 3: Feb 5th-Feb 13th***Volcanoes: Eruption Styles, Volcano Monitoring and Hazards.*****Lodging: Mt Ruapehu, Whakapapa Village**

Large stratovolcanoes are what come to mind when one typically imagines a volcano. In this module, you will learn how these types of volcanoes are constructed over time, the scale of the different eruption types and their resulting volcanic deposits, the frequency of eruptions, and what happens to these volcanoes when they are not erupting. In addition, you will learn about the associated hazards of these volcanoes and put your newfound mapping skills and volcanic knowledge to the test in an eruption simulation exercise.

Field Module 4: Feb 15-17th
Research Projects

Lodging: Ilam Apartments

This module of field camp will introduce you to various ongoing research themes of Frontiers Abroad and the University of Canterbury. In this module you will be introduced to your research mentors, a research theme, and your research group (~ 4 students per research team). You will work as a team with a mentor and start the research process with research definition, methods and research parameters, and collection of field data sets. This module will be the beginning of your semester-long team research project. During this week, some groups will be collecting data and some groups will be processing data already collected. You will be based on the University of Canterbury campus.

Field Module 5: Mid Semester Break
Covid replacement contingency: Structural Geologic Field Mapping in Kaikoura

Lodging at Dusky Lodge, Kaikoura

This module will be used if students or groups of students are not able to participate in a module due to COVID.

This module will advance student's field mapping skills on the tectonically active, Kaikoura Peninsula. Geologic mapping of the Kaikoura Peninsula represents the culmination of your field mapping experience and will require an applied synthesis of all field techniques learned to date. Students will continue to improve their field mapping skills, and will be required to deliver the compilation of a detailed cross section, stratigraphic column and geological map of the peninsula. Key geomorphologic elements, including extensive terrace features, will also be mapped. Students will develop an understanding of the structural and geomorphic evolution of the peninsula, and be exposed to Quaternary landform processes.

Earth Systems Field Camp

For 4 weeks, students will travel throughout New Zealand, visiting the South and North Islands, deciphering the earth systems of New Zealand from a series of field modules. This is a field camp experience with the goal of providing students with a skill base of field focused techniques that will enable them to understand the New Zealand Earth System. Fieldwork is complemented by exercises, lectures and reflections in the evenings. **During mid semester break we may have a module if students are unable to participate during field camp due to COVID.**

Field Module 1: Jan 23 – 31st

Kaitiakitanga, Indigenous knowledge & field skills

Lodging at Blue Lake Holiday Park, Forest and Bird Field Station, Whakapapa Village and Waitomo

Like all indigenous peoples, the Māori of Aotearoa/New Zealand have a tradition of unity with the environment and have developed their own views of ecosystems throughout their history. Most of them are based in traditional knowledge systems, which they use to understand and interpret their own biophysical environments. These systems of living as a part of and managing the environment constitute a key part of the cultural identity and social integrity of many indigenous peoples. Additionally, indigenous knowledge embodies a wealth of wisdom and experience of ecosystems gained over millennia from direct observations, and transmitted – most often orally – over generations. In this module we will investigate how indigenous Māori knowledge including principles, perspectives and practices regarding natural hazards, disaster risk reduction and resource management are being implemented in a contemporary setting. We will also investigate the New Zealand Anthroposphere using both “Western Science” and “Indigenous Knowledge” to understand how the landscape was formed and how that landscape interacts with humans (hazards

and resources). We will then look at the commonalities and differences of indigenous knowledge and Western Science.

An additional goal of module 1 is to provide students with field skills needed for the course. Over the module, we will introduce basic environmental, geologic and biologic field skills and techniques that you will use throughout the program. This includes how to take field notes, sketch outcrops, and identify trees and plants.

Field Module 2: Feb 2nd - 6th

New Zealand Climate and Conservation

Lodging: Aoraki/Mt Cook National Park

In this module we will apply the field methods students have developed in the last three weeks to investigate the challenges the Department of Conservation (DOC) faces managing the intersecting spheres of the earth system in Aoraki Mt Cook National Park. Today anthropogenic climate change and an exponential increase in international tourism are reshaping the park. In this rapidly changing environment, DOC is attempting to develop a management strategy that addresses the needs of a diverse group of stakeholders including overseas visitors (a crucial component of the NZ economy), NZ alpine climbers and nature enthusiasts, tour operators seeking to profit off (primarily) international tourists, and indigenous peoples for whom the land has cultural significance. In 2018, DOC made a draft management plan for 2020 – 2030 available for public comment. In their submission, the New Zealand Alpine Club argued that the draft plan “does not preserve national park values” because it prioritizes development and overseas visitors over “preservation of the natural environment” and the use of the Park by New Zealanders.

During our time in Aoraki/Mt Cook National Park, we will use the Earth Systems approach you developed during Module 1 to explore the concept of “national park values.” Questions we’ll consider during this module include:

- How are the hydrosphere, geosphere, pedosphere, and biosphere in Aoraki Mt Cook National Park changing in responding to local and global pressure from the anthroposphere?

- What sort of knowledge does DOC need to effectively manage the park? How can science and mātauranga Maori be used to inform decision making?
- What strategies can DOC use to balance the many values of Aoraki Mt Cook National Park— ecologic, geologic, hydrologic, economic, cultural, aesthetic, intrinsic – when they come into conflict?
- Ultimately, what is the value of a national park?

Field Module 3: February 8th-11th

New Zealand Geosphere & Biosphere in Castle Hill Basin

Lodging at Cass Field Station

This module will introduce you to the New Zealand Geosphere & Biosphere through two exercises. The first is *introduction to geologic mapping techniques*. This fun exercise will build upon your field mapping skills and include the compilation of a surficial geologic map with contacts, key structures, deposits, and geomorphic features. Our goal is for you to learn mapping in a fun way – and understand how New Zealand was formed. The second exercise will introduce alpine vegetation and field biology methods. Our goal is to teach you how to complete vegetation surveys so you are ready for the research week (for those doing ecology projects).

Field Module 4:

Semester Research Projects

Lodging: Living Springs, Banks Peninsula

This module of field camp will introduce you to various ongoing research tangents and themes of Frontiers Abroad and the University of Canterbury. You be introduced to your research mentors and their research themes. These themes includes (subject to change):

1. Ecological Monitoring for Kaimahi for Nature Restoration Projects (Ecology Based)
2. Blue Carbon & Climate Science
3. Great Migrations and Whale Monitoring using remote sensing
4. Water Management

This year, research projects will be conducted as a team. You will work with your team and mentor to start the research process during this week, as a basis for your

semester team research project. Some students will be collecting data and some will begin working on data already collected.

Field Camp Gear List

You will need the following items for your stay in New Zealand. You will be in New Zealand for the Summer and Spring months when temperatures range between 30° F and 80° F. During the field component of the program we will mostly be staying in research stations and lodges. This list is not comprehensive. Please be prepared to be in the cold and rain – and pack accordingly.

Suggested Field Camp Gear (this list is not comprehensive – if you feel you need something else, then please pack it!) You will be able to do laundry a few times over field camp but at most places there is a charge for this.

Remember – you will arrive at your apartments before we head into the field. So you will have a chance to re-pack for the field. We will return to Ilam in between modules.

- 1 rain shell and rain pants
- 1 fleece top
- 1 base layer (top and bottom – Capalene or synthetic)
- 1-2 sweatshirt
- 1-2 pairs of jeans/pants
- 1 pair warm pants
- 1-2 pairs of shorts
- 1 bathing suit
- 6 shirts (at least 1 synthetic)
- 1 sun hat with brim all the way around
- 1 beanie (ski cap)
- warm gloves
- 6 pairs of undergarments
- 6 pairs of socks (wool or synthetic)
- bath towel
- 1 pair of hiking boots (make sure in good condition)
- 1 pair of shoes
- shower flip-flops

- small tent (optional)
- at least 2 water bottles
- headlamp
- day backpack (large enough to hold field supplies and food and comfortable to wear for the whole day)
- toiletries
- small pillow
- sunglasses
- laptop computer
- sun screen
- field notebook
- hand lens
- pens and pencils
- colored pencils, protractor, erasers

Section 2 - Semester Programme at the University of Canterbury (UC)

Following field camp, you transition to the University of Canterbury for your semester study. At UC, you will take 4 classes, one of which is the research methods course just for FA students. The rest of your courses will have both international and Kiwi students. FA meets every week for their research course. In addition, our staff will be on campus during the week to support you. UC is a large institution and courses will be different than you are used to. There will be fewer assessments/assignments and each assessment/assignment is worth more towards your overall grade. Students who are self-motivated succeed well. Students who require constant feedback from professors can have challenges with the educational system in New Zealand. You will also have more free time than you are used to. We encourage you to join clubs to explore New Zealand while you are here.

International Orientation

International orientation will be held Monday, February 13th for ES and Tuesday Feb 14th for Geo. Classes begin on the 20th of February. Orientation is mandatory. You will be introduced to the University of Canterbury and their procedures and protocols. More information on the University of Canterbury's International orientation can be found here:

<https://www.canterbury.ac.nz/international/how-do-i-enrol/welcome/>

UC Clubs

During orientation, you will also be introduced to the various clubs on campus. This is the best way to meet Kiwi's and get out into the outdoors. For more information on UC clubs visit this site:

<https://ucsa.org.nz/clubs/>

There is a club for every interest!

Enrolling in Courses

In your offer of place (Max sent to you) you will receive instructions on how to enroll in courses. Please be in touch if there are any issues. You will have the opportunity to change your pre-enrolled courses (called papers in New Zealand).

You are required to enroll in the “Field-focused Research in Geology” course (GEOL 356 23X) or “Field-focused Research in Environmental Science” course (ENVR 356 23X) where you will design and develop an independent research project as part of a broader team focus. Both the Geology and ES team will be in the same research class.

In addition to the Research Methods course, you can enroll in three other courses from the general UC catalog.

Two notes:

1. Upon registering for classes, an automatic response saying you do not meet the pre-requisites will be sent to you. This is automatic and a course coordinator just needs to approve you for the course.
2. As a rule, Study Abroad Students may not take 400 Level courses. If you want to take a 400 level course you must get in touch with the course coordinator to see if they will allow it.

Housing

During the semester you will stay at Ilam Apartments or Sonoda Apartments. You will have your own room in a 4-5 person apartment. The apartments are on campus. To learn more visit: <https://www.canterbury.ac.nz/life/accommodation/>.

Apartments are self-catered and you will provide your own meals.

Section 3 - Medical Information

By designing our programmes in New Zealand we benefit from a developed nation with top rate medical facilities and emergency care. During most of the field camp component of our programme we will be within 1 hour of a hospital. New Zealand has socialized medical service so everybody in New Zealand has health care, including visitors. In addition, we provide our students with additional health insurance to minimize wait time and gain access to the best doctors in New Zealand. Please see our health and safety information in the following section of this document for more information.

Doctor's Offices/Medical Centers

During your semester at UC there are 4 hospitals/doctor's offices you need to be aware of:

1. **UC Health Centre:** For general appointments (non-emergencies) and local counselors. Located on campus and you can make appointments online or via the phone. <https://www.canterbury.ac.nz/healthcentre/>
2. **Riccarton Clinic:** Urgent care between the hours of 8:00am and 8:00pm. This facility is near campus and used for more serious injuries that do not require the Emergency room. <https://www.riccartonclinic.co.nz/>. **4 Yaldhurst Rd, Church Corner, Christchurch**
3. **24 Hour Surgery:** 24 hour Urgent care. This is further from campus but easily acceptable via taxis or Uber. This is for non-emergency room after hour needs. <https://www.24hoursurgery.co.nz/>. **401 Madras St. Entrance on left before Bealey Avenue**
4. **Christchurch Hospital Emergency Center:** For emergencies. Dial 111. Ambulance will transport you to hospital. Emergency Department Ground Floor, Waipapa, Christchurch Hospital, Riccarton Avenue

COVID-19 Information

New Zealand has a national strategy for COVID that has been very successful in keeping COVID out of the community and people safe. Frontiers Abroad must follow this policy. If a student tests positive during the semester or field camp they will be required to isolate (currently 5 days). In addition, students will take regular RAT tests to ensure we are COVID free when going into the field. FA has

developed a virtual field camp. If you miss weeks of field camp you will still be able to complete field camp online. Students will have FA and University support if they test positive for COVID-19.

Please ensure you fill out the online medical and dietary form. This is on the “Next Steps Webpage” provided by Max.

Emotional Support

During the field camp programme you will throughout the North and South Island of New Zealand. Staff associated with the programme provide pastoral care; however, if further support is required by you prior to or during the programme, Frontiers Abroad will assist in facilitation. We recommend your US based emotional supports (i.e. counselor, psychologist) be advised of your enrolment in the programme and that contact (if required) is maintained throughout your time in New Zealand.

Level of Fitness

A reasonable level of fitness is required throughout the field programme. This includes hiking over uneven terrain in coastal environments and mountainous areas. If you have any pre-existing conditions please consult your doctor and provide this information in the “forms” section of this guide.

Medication

Prior to arriving, make sure that you have visited with your doctor to ensure you are healthy and able to live and function in New Zealand. If you are under medication then you should have sufficient quantities to last for your time in New Zealand. If your medications will not last the 5 months, then ensure that medications are available at pharmacies in New Zealand and that you have the proper prescriptions to obtain them.

If you have specific medical concerns and would like to consult with a New Zealand doctor, please visit this directory to identify the appropriate doctor.
<http://www.nzs.com/health/region.html>

Information on NZ Vaccination and Medications from the Center for Disease control (<http://wwwn.cdc.gov/travel/destinationNewZealand.aspx#safety>)

We recommend seeing a health-care provider at least 4–6 weeks before your trip to allow time for your vaccines to take effect. Even if you have less than 4 weeks before you leave, you should still see a health-care provider for needed vaccines, medications, and information/advice about how to protect yourself from illness and injury while traveling. If your travel plans will take you to more than one country during a single trip, be sure to let your health-care provider know so that you can receive the appropriate vaccinations and information for all of your destinations. If you plan on traveling to other countries you may also need additional vaccinations as required. Please visit the Center for Disease Control at www.cdc.gov/ for more information.

Be sure your routine vaccinations are up-to-date. Routine vaccines, as they are often called, such as for influenza, chickenpox (or varicella), polio, measles/mumps/rubella (MMR), and diphtheria/pertussis/tetanus (DPT) are given at all stages of life; see the childhood and adolescent immunization schedule and routine adult immunization schedule.

Routine vaccines are recommended even if you do not travel. Although childhood diseases, such as measles, rarely occur in the United States, they are still common in many parts of the world. A traveler who is not vaccinated would be at risk for infection.

Medicines you may need:

The prescription medicines you take every day. Make sure you have enough to last during your trip. Keep them in their original prescription bottles and always in your carry-on luggage. Be sure to follow security guidelines if the medicines are liquids.

Note: Some drugs available by prescription in the US are illegal in other countries. Check the US Department of State Consular Information Sheets for the country(s) you intend to visit or the embassy or consulate for that country(s). If your medication is not allowed in the country you will be visiting, ask your health-care provider to write a letter on office stationery stating the medication has been prescribed for you.

New Zealand also has high levels of pollens that you have not been exposed to before. It is recommended that if you have known allergies that you carry antihistamines.

Section 4 – In Country Information

Personal Insurance

Insurance is provided as part of the Frontiers Abroad programme. Insurance is arranged for you through the preferred provider of the University of Canterbury. The following are the details of the insurance policy. Please visit the below LINK to learn about the policy. Again, you do not need to do anything.

<https://www.insurancesafenz.com/studentsafe/student-safe-inbound-university>

Please note: your student number on your “offer of place” is your policy number.

Important note: Pre-existing conditions of health are not covered (*Unless you have applied to the insurer and have received notice of acceptance from the insurer*). Please be in contact with Max if you have pre-existing conditions you want covered. There will be an additional charge.

In Country Services

Cell phone

Upon arrival to New Zealand you will have the option of purchasing a cell phone or New Zealand chip to go into your US cell phone. Prepay cards or plans may be purchased. We strongly recommend you buy a cell phone and provide the numbers to your family back home and to Frontiers Abroad representatives. This will be your primary means of communication as INTERNET is not consistent throughout field camp.

Mail

You can have mail sent to your apartments (address given when you are assigned your room or by sending to Frontiers Abroad at:

Frontiers Abroad

3 Harbour View Terrace
Lyttelton
Christchurch 8082
New Zealand

Banking

Free student banking is provided by the ANZ. ATM (MAC) machines are present throughout New Zealand to access your US account (fees may apply so research this prior to leaving). Students will have weekly access to ATMs during the field camp and daily access during the campus component of the programme.

Food

During the field camp, Frontiers Abroad will provide meals when we are spending the nights at field stations. When we are at Ilam or on travel days, students provide their own meals. A special meal form will be sent to you online and is to be filled out and submitted prior to the start of the field camp if you have food allergies or special dietary needs.

During the campus component in Christchurch, you will provide your own meals. Several supermarkets are located near the University of Canterbury to accommodate most possible food needs.

Section 3 – Additional Health and Safety

SPECIAL NOTE: Since September 4th, 2010 the City of Christchurch has been experiencing aftershocks. On February 22nd, 2011 a large earthquake caused extensive damage to Christchurch and the University of Canterbury semester was interrupted. As a result, Frontiers Abroad relocated its 2011 Geology programme to Victoria University in Wellington and its Earth Systems programme to the University of Auckland in order to ensure the well-being of our students and maintain the academic integrity of our programme. Today, earthquake activity has decreased considerably but there is the possibility that an aftershock could disrupt academic programmes at the University of Canterbury. If such an earthquake occurs during a future Frontiers Abroad programme and Frontiers Abroad feels the University of Canterbury cannot deliver a safe academic experience, then our students will be relocated to another region and course will be accomplished remotely.

Providing a safe learning experience is Frontiers Abroad's primary objective. By designing our programmes in New Zealand we benefit from a developed nation with top rate medical facilities and emergency care. However, we cannot totally guarantee your safety while working in the outdoors during the field camp, and for the campus component, you will be living in a metropolitan area with all the hazards that go along with being in large cities. We can provide you with information on minimizing your risks while in New Zealand and ask you to act in a responsible adult manner. In addition, we have taken several measures to ensure that your experience will be as safe as possible.

During most of the field camp, we will be within one hour of a hospital and with nearly constant cell phone reception. New Zealand has socialized medical service so everybody in New Zealand has health care, including visitors. In addition, we provide our students with additional health insurance to minimize wait time and ensure that our students can see any doctor in New Zealand.

In this section we will present you with some of New Zealand's prevalent hazards, provide you with resources to learn how to minimize hazards, and techniques for mitigating and avoiding these hazards.

Hazards

New Zealand is an isolated country that presents an interesting array of safety hazards. Problems that make study abroad programmes in other regions of the world dangerous are rare in New Zealand. Civil and political unrest, water borne diseases such as cholera and hepatitis, and insects are rare. However, hazards do exist.

Earthquakes

See 'Special Note' above.

Since September 4th, 2010 the City of Christchurch has been experiencing numerous earthquakes. On February 22nd, 2011 a large earthquake caused extensive damage to Christchurch and the University of Canterbury semester was interrupted. As a result, the 2011 Frontiers Abroad relocated its Geology programme to Victoria University in Wellington and its Earth Systems programme to the University of Auckland in order to ensure the well-being of our students and maintain the academic integrity of our programme. Today, earthquake activity has decreased considerably, but there is the possibility that an aftershock could disrupt academic programmes at the University of Canterbury. If such an earthquake occurs during a future Frontiers Abroad programme and Frontiers Abroad feels the University of Canterbury cannot deliver a safe academic experience, then our students will be relocated together to another New Zealand University or, potentially canceled.

Sun Exposure

Sun intensity during the austral summer is probably the strongest in the world. Being uncovered for more than 15 minutes can lead to substantial sunburn. This coupled with the exercise you will do while hiking and working in the field can lead to severe heat exhaustion and in some cases heat stroke. To avoid this we mandate that you bring and apply sun-screen, wear a wide-brimmed hat at all times while in the field, and drink lots of water. We will not work in the field if temperatures exceed 95 degrees. This is a hazard in New Zealand that we take seriously.

Active Volcanoes

During the field camp we will visit several active volcanoes. These volcanoes are active and have erupted in recent times (i.e. Mt. Tongariro in August, 2012). These volcanoes are constantly monitored and we will only work on them if the Geologic and Nuclear Sciences (GNS) deem them to be safe. Prior to entering an active volcano zone we will call up the volcanoes' monitoring center and see if it is safe to work on the volcano.

Geothermal Features

During our field camp we will visit several geothermal features (pools, geysers, production fields). These features contain waters in excess of 100 degrees Celsius. Students must take great care when visiting these areas and make sure they walk on designated paths.

Extreme Landscape

During our field camp we will be working in extreme environments. For example several exercises will take place on the sides of steep slopes. Twisted ankles and broken bones are all possible injuries that can be sustained. To minimize this hazard, students are required to bring hiking boots. Furthermore, no students will be allowed to work on slopes greater than 45°. If students do sustain injuries then we will follow the guidelines established in our health and safety information below.

Swimming

During your stay in New Zealand you will be both swimming and working in coastal environments. You should be able to swim. If you cannot swim then you must let us know so we can take the necessary steps to providing a safe working condition for you.

Christchurch Hazards

The City of Christchurch has over 400,000 people and all the hazards and threats associated with large cities – especially after a natural disaster. The downtown

area of Christchurch is off limits to all people while the rebuilding process is underway.

In addition, assaults, crimes of dishonesty - including burglary, unlawful taking, theft and fraud, sexual assault, and associated accidents are all possible. Please refer to our safety education section to learn how to reduce your risks while in cities and foreign countries.

In Case of Emergencies

In case of emergencies that might arise during your study abroad experience, Frontiers Abroad will implement its Emergency Action Plan (EAP). Our EAP follows an established set of guidelines for dealing with emergencies in both field and city settings.

EAP Field Camp (off campus)

For non-life threatening situations (twisted ankle, broken limbs, etc), Frontiers Abroad representatives will administer first aid then transport the student to the nearest hospital. We will generally always be within 1 hour drive from the nearest hospital and in near-constant cell phone reception. If students are unable to move, then emergency medical technicians will be dispatched to the site. This scenario exists for Frontier Abroad staff members as well. A staff member will always be on site. Through our communication network, the family of the injured will be contacted as soon as it is safely possible to do so (if the student has authorized Frontiers Abroad to do so).

For life threatening injuries (significant falls, car accidents, etc.), if appropriate, Frontiers Abroad Representatives will administer first aid and/or CPR and immediately contact New Zealand emergency medical facilities. The injured will be transported to the nearest hospital. Through our communication network, the family of the injured will be contacted as soon as possible.

All hospitals in our field areas have been mapped. Phone numbers of the emergency contacts and hospitals are carried by each student and Frontiers Abroad Staff.

For natural disasters (volcanic eruptions, earthquakes, floods, tsunamis), the best management is preparation and reliance upon existing monitoring networks. For

instance, Frontiers Abroad will be in contact with those responsible for monitoring volcanic and seismic activity (in fact, some of these people will be teaching Frontiers Abroad modules) and we will determine if it is safe to work in these environments. In case of an emergency, Frontiers Abroad representatives will transport students to safe zones and contact New Zealand Civil Defense to determine the best course of action. During these emergencies we will contact the families of students as soon as it is safe to do so.

***** Please see special note at top of section for specific information on relocation due to earthquakes in Christchurch City.**

EAP Summary for Christchurch City

While at the University of Canterbury, Frontiers Abroad relies on the medical and emergency staff of the University of Canterbury and Christchurch city to provide emergency medical and mental health services. During this portion of the study abroad experience Frontiers Abroad is not constantly in contact with the students. We do, however, require weekly meetings to discuss both academic and health and living issues. Furthermore, Frontiers Abroad representatives work at the University of Canterbury. These representatives are available 24 hours to support the students.

In an emergency, either life threatening or non-life threatening situations, the University of Canterbury will be notified. **Frontiers Abroad representatives will make final decisions with respect to the welfare of the group. If a student does not abide by the rules established during an emergency situation then Frontiers Abroad retains the right to remove the offending student from the programme and a programme refund will not be provided. In the event of an emergency, students may be relocated to another New Zealand University or the program may be cancelled.**

If the case is criminal in nature then Christchurch Police will be notified and assess the situation as well. As soon as Frontiers Abroad is notified of the situation, the student's family will be contacted and informed of the situation.