Climate Science in Chamonix

AMAZE EXPLORE EDUCATE

A study abroad opportunity in the French Alps hosted by the Research Center for Alpine Ecosystems

CREA Mont-Blanc offers a research program aimed at English-speaking college students wishing to participate in an academic study abroad program focused upon climate change issues.
This program targets groups of students from a single institution travelling with a professor. We offer to work together to design a program specifically adapted to your needs and the needs of your students and institution. The exact format of the trip will be determined through our collaboration.

What is CREA Mont-Blanc?

Founded in 1996 and based in Chamonix, France, the Research Center for Alpine Ecosystems (CREA Mont-Blanc) is a scientific NGO dedicated to exploring and understanding the impacts of climate change on biodiversity. Recognized in 2017 by the United Nations for its work, CREA Mont Blanc combines high quality ecological research with communication and education initiatives.
CREA Mont-Blanc is a leader of citizen science in France, aiming not only to encourage the understanding of ecology, but also to directly involve the public in innovative scientific research.

Our areas of expertise

Fauna: Identification, phenology, population dynamics of fauna, plant-herbivore interactions
Flora: Plant phenology and identification, study of long-term vegetation dynamics, habitat mapping
Climatology: Temperature and snow cover data collection; trend analysis
Big picture: The different facets of biodiversity responding to climate and land use change pressures

Objectives of Climate Science in Chamonix

Academic: During the program, students will learn about and see first-hand the effects of climate change on the alpine environment. They will also 'get their hands dirty' and learn field work methodology.

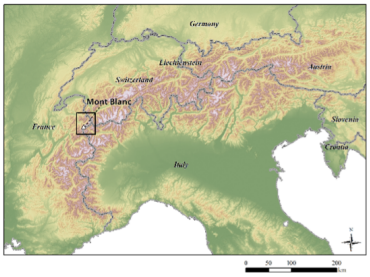
Citizen Science and Research: Citizen science is a key element of the work done at CREA Mont-Blanc and the data collected by visiting students are important for our research. As a small institution, we rely on the participation of volunteers and students and all data collected is incorporated into the Mont-Blanc Atlas database where it can be viewed in real time. In addition, we will use any revenue generated by the study abroad program to help us fund our research.

Exchange: When people come together, exchange of knowledge and ideas leads to breakthroughs and innovation. We are always excited to work with other researchers and exchange with academics and students from around the world, and it is our hope that the program not only provides for exchange during the course but also for long-term collaboration.

CREA Mont-Blanc maintains strong scientific collaborations and partnerships with other multi-disciplinary and international research teams who can lend additional expertise to your program.




Why Chamonix? Why Mont-Blanc?



Located in a high valley in the French Alps at the base of the highest peak in Western Europe, Chamonix-Mont-Blanc is world-renowned for its dramatic scenery, alpine sports and rich history.

Using Chamonix as a base camp allows you and your students to visit world class cultural and natural sites in three countries.

The Mont-Blanc massif is not only an emblematic landscape steeped in history, it is also a truly unique study area. With an exceptional elevation gradient of 14,000ft from the Arve Valley to the summit of Mont Blanc, and the possibility to explore all aspects, the massif allows for an incredibly rich and diverse study zone in a relatively small area.

Proposed 6 days itinerary

Customizable Research Experience

The proposal to take part in CREA Mont-Blanc's Climate Science in Chamonix is an invitation to work together to design a program specifically adapted to your needs as well as the needs of your students and your institution. The itinerary proposed below should be used as a framework, and not as a fixed program.
Although the program was designed to complement the studies in the sciences, the program could be adapted to students in the humanities or social sciences.
The program could be lengthened with inclusion of class time, tourism, additional pedagogical content...

Day 1	Arrival, welcome dinner with CREA Mont-Blanc representative(s); night in Chamonix
Day 2	Full day hike in the Chamonix Valley : Understanding and identifying mountain habitats/gradients and elements of a landscape (glacier, rock, water, ecosystems, human activities), and discussing what climate change means in the Alps.
Day 3	Morning: Classroom introduction to CREA Mont-Blanc's monitoring activities, Citizen Science, and conclusion to the previous day's introduction to alpine ecology Afternoon: Hike to one of CREA Mont-Blanc permanent study sites (Loriaz, or equivalent) and learn scientific protocols along the way Evening: Night in a hut (Refuge de Loriaz or Refuge du Plan de l'Aiguille or equivalent
Day 4	Scientific protocols at the study site, in small groups with scientists (Objectives: use CREA Mont-Blanc protocols to make observations on phenology, species distribution; maintain equipment (camera traps, etc.) and hike back to Chamonix
Day 5	Free morning (or class time with professor, visit...) Afternoon: Data analysis session / group work Objectives: work on collected/existing data to make simple analyses or data visualization graphs/maps; examine Mont-Blanc data series and compare with other locations; use R or other simple statistical tools; discuss and identify new ways to share results with the public (data visualization, etc.)
Day 6	Visit to world-renowned Aiguille du Midi Closing session at CREA Mont-Blanc: Wrap up scientific portion trip (treatment and data entry) Possibility to extend the stay and add another night in the hut, to travel to location in Italy or Switzerland: Rifugio Bonatti or Champex Alpine Botanical Garden, Switzerland or Refuge des Prés Contamines Mont-joie

The Team

CREA Mont-Blanc includes a team of scientists, researchers, ecologists and other professionals dedicated to the mission of assessing climate change in the Alps. High mountain guides or mountain leaders, passionate people, the whole team will put their skills at the service of the group.

Scientific and Physical Requirements

CREA has experience leading trips with volunteers with a wide variety of backgrounds and scientific experiences. We do not require that participants have scientific experience and can adapt what we offer to fit your group. Your institution may establish eligibility or prerequisite requirements.

While the center of the town of Chamonix is not located at a high mountain altitude (1000m), much of CREA Mont-Blanc's work occurs at higher elevations surrounding the town. We often carry out fieldwork with volunteers near the Refuge de Loriaz mountain hut (elevation 2020m) and visit the Aiguille du Midi (elevation 3842m).

Legal Disclaimer

The organizing university and associated professor will be legally responsible for the well-being of the students. CREA Mont-Blanc does not provide academic assessment for the work done during the program.

For more information:
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