

Forest Perspectives FROM THE SOUTH ECOLOGY

Senda Darwin

Biological

Station



Dive into the wonders of southern Chile's temperate forests with an intensive course featuring hands-on fieldwork, exploring ecology, biodiversity, and history!

2026-2027 EDITION

About us

UC | Chile was founded in 1888, and it is one of Chile's oldest universities and one of the most recognized educational institutions in Latin America. It has a permanent commitment to quality service to fulfill our founding mission. UC | Chile holds hold rigorous academic standards and adopt international best practices from top universities worldwide.

The University has 18 faculties, including schools and institutes; the <u>UC College Program</u>, and the <u>Villarrica Campus</u>, which together cover all six areas of knowledge. Also, it has four campuses in Santiago and one in Villarrica, in Southern Chile. Each of them has its own identity and it is linked to a different historical moment.



In Chilean invention patent applications



QS Ranking Chile 2025



QS WUR Ranking By Subject Agriculture and Forestry 2024



QS Best Student Cities 2025 Santiago



QS World Ranking 2025



QS Sustainability Rankings 2024



Faculty of Biological Sciences

The Faculty of Biological Sciences is the Academic Unit responsible for advancing biological sciences at the Pontifical Catholic University of Chile. To this end, the Faculty conducts original scientific research, translates these findings into innovation, and teaches the discipline at both basic and advanced levels. More than 40 years after its founding, our Faculty maintains an intense, diverse, and excellent research and educational activity, which has positioned it as an institution of recognized prestige, both within the University and in the national and international scientific community.

Currently, the Faculty of Biological Sciences trains over 600 undergraduate students in its own programs, distributed across Biology, Biochemistry, and Marine Biology. Additionally, it serves an average of 4,052 undergraduate students from other programs annually, whose training requires biological education. At the advanced education level, since 1970, this Faculty has offered one of the oldest Doctoral Programs.



On-campus





Online courses



The Senda Darwin Biological Station (EBSD)

The <u>Senda Darwin Biological Station</u> (EBSD) was named in honor of the British naturalist Charles Darwin, who during his journey in 1834 through the Chiloé archipelago passed through the area where the Station is now located. It was founded in 1996 by a group of researchers led by Juan Armesto and Mary Wilson, and today is managed by the Senda Darwin Foundation with the support of the IEB. It also forms part of the Pontificia Universidad Católica de Chile's network of regional centers.

The Senda Darwin Biological Station is a privately owned protected area covering 113 hectares and encompassing grassland, matorral and temperate rainforest, and serves as a base for scientific research, environmental education and conservation. In the words of Charles Darwin, this tangled rainforest dominated a large part of the landscape of Chiloé some 200 years ago. Senda Darwin is currently home to the two most important and biologically diverse types of native evergreen rainforest: The Valdivian forest and the North Patagonian forest, but it also contains grassland, peatlands, matorral, tepual forests, Pilgerodendron cypress forests and rivers, representing the diverse range of the Chiloé archipelago's continental ecosystems.

Common native animals and plants can be seen and studied here, such as the monito del monte (Dromiciops gliroides), Darwin's frog (Rhinoderma darwinii), Darwin's fox (Lycalopex fulvipes), the coigüe de Chiloé (Nothofagus nitida) and beautiful red flowering climbers such as the Chilean pitcher flower (Sarmienta scandens), the estrellita (Asteranthera ovata) and the Chilean mitre flower (Mitraria coccinea).

Location: Chiloé Island, District of Ancud, Los Lagos Region.



Course overview Forest Ecology

This intensive course, featuring practical fieldwork, focuses on the ecology, biodiversity, history, and conservation of southern Chile's temperate forests. Participants will analyze the history, floristic diversity, biological interactions, and regeneration dynamics of Chilean forests, situating these within the broader patterns and processes of temperate and tropical forests. The course also explores the ethical and empirical foundations underpinning sustainable management and conservation of forest ecosystems.

Schedule

The application deadline for the 2025 and 2026 intakes is September 30th.

LENGTH	UC CHILE CREDITS	ECTS CREDITS	MODALITY	2026
Intensive	10	6	On-Site, Senda Darwin Biological Station	12-23 January

In addition, customized programs can be offered online or on-campus throughout the year. You can work with our team to design programs that suit your specific needs and interests.

Academic Program

The course is held at the <u>Senda Darwin Biological Station</u> in Chiloé, concentrated over 10 days with two daily theoretical sessions.

1. Historical Introduction.

- 1.1 The Chilean Forest, a biogeographical island. Species diversity and endemism. The Gondwanan connection.
 - 1.1.1 Glacial refuges. Regions of biological diversity concentration. Types of Chilean forests.
- 1.2 Changes in forest cover at the global level. Current state of forests in Chile. Examples of fragmentation in Chilean forests: cases of the Maulino forest and Chiloé.
- 1.3 Discussion: Field research projects.

2. Biodiversity, Interactions, and Evolutionary Aspects.

- 2.1 The detritosphere and the tree canopy: two frontiers of knowledge in forest ecosystems. Biodiversity and functional groups in the detritosphere. The detritus layer in the forest cycle.
- 2.2 Mutualisms and coevolution in temperate and tropical forests. Pollination, seed dispersal in Chiloé forests. Herbivory, seed predation.
- 2.3 Discussion II: Keystone species and extinction in fragmented landscapes.

3. Forest Dynamics.

- 3.1 "Biological legacies" and forest regeneration. Disturbance regimes in Andean and coastal forests. Evolution of life history. Regeneration dynamics in clearings.
- 3.2 Germination strategies, plant establishment, herbivory in Chiloé forests.
- 3.3 Discussion III: Succession, dynamics, and "resilience".

4. Forest Ecosystems and the Biosphere.

- 4.1 The forest ecosystem. Bormann & Likens model. Carbon cycle, photosynthesis, biomass, and primary productivity. "Sources and sinks" of carbon. Forests and the global carbon cycle.
- 4.2 Consequences of converting forests into plantations and the global carbon cycle.

5. Conservation and Management.

- 5.1 Concept of sustainability in forest ecosystems. Adaptive management and monitoring. Harvesting systems.
- 5.2 Variable retention harvesting. Evaluation and monitoring in forest management. Forest legislation in Chile.
- 5.3 Discussion V: What is a sustainable forestry project?
- 5.4 Discussion of fieldwork results.





Academic Program

 Course: Forest Ecology 10 UC Chile Credits Course Transcript Field Observations

Certificate of Attendance and Transcript

Social and Cultural Program

- Orientation program (welcome & farewell meeting)
- Social Activities with UC Chile Students (Buddy Program)

The Social and Cultural Program will be scheduled after the registration process has been completed. Detailed information will be sent to the participants via email.

Services

- Travel information and immigration
- Housing information and recommendations
- UC | Chile ID
- Wi-Fi Connection on campus
- Access to the Library
- Airport transportation to housing is available exclusively for groups of 5 or more people

Requirements

- Scanned copy of a valid passport page for the entire study abroad period (pdf or jpeg).
- Passport-style color photograph size of 20 to 60kb in JPG format.



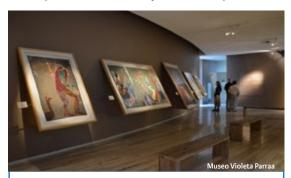
USD \$ 1,500

Accommodations

Senda Darwin Station offers its visitors a specially equipped guest house to accommodate and feed 25 guests. The house features 6 shared rooms for 4 people each, 3 bathrooms, a spacious kitchen, and a dining-living room that can also be used for workshops and meetings. Additionally, it has cozy and heated lounge areas with slow-burning wood stoves, ensuring a comfortable stay during the cold winter days.

Chilean Immersive Experience

Here you have a complementary list of activities during your stay.



Spanish in Chile / Cultural Program

Visit to the Human Rights Museum

Visit to the Violeta Parra Museum

Visit to Art Gallery: Indigenous Peoples



Enjoy your Stay in Santiago at UC Chile!

- Santiago Metropolitan Park
- Santiago Cable Car (Teleférico)
- Centro Cultural La Moneda (CCLM)
- Chilean Museum of Pre-Columbian Art

Sustainable Mobility Experience



We hope that this guide will inspire you to contribute to a greener and more sustainable world by mitigating the impact we generate as human beings on the environment.

DOWNLOAD THE GREEN GUIDE



Contact

To request more information about this and other opportunities to study abroad, please contact: Cristián Bonilla, M.A., Head of Study Abroad & International Internships cbonillam@uc.cl

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