

WHEN THE ANDES MEET THE SEA: STUDY AND INTERN IN PATAGONIA

Course Descriptions

Pre-departure orientation course (Course Number TBD – 1 credit): In January, students will attend a series of hybrid orientation sessions to familiarize themselves with the program themes, meet their Chilean student counterparts, and navigate the logistics of the upcoming program, prior to departure. Taught by faculty team.

Forest Ecology (FES 341 – 3 credits) This course delves into the fundamental aspects of forest ecosystems, encompassing the multiple factors that shape forest composition, structure and function. Participants will engage in an in-depth exploration of forest ecology and management within diverse Chilean Temperate and Patagonian forests and compare them to the forest ecosystems of Oregon. This will include natural forests as well as managed forest across a spectrum of landscapes ranging from coastal regions to the foothills of the Andes and extending to the arid steppe on the eastern side of Chilean Patagonia. The course will be carried out on a variety of settings: field activities at Universidad de Chile's research station, a multiple day [road trip](#) through Patagonia visiting spectacular national parks including high mountain and glacial sites, and diverse forest systems. OSU faculty: Dr. Carlos Gonzalez (Forest Engineering, Resources and Management), Dr. Chris Still (Forest Ecosystems and Society)

Aquatic Systems and Salmon conflicts (FW499 – 3 credits): This course will focus on understanding aquatic ecosystems from an environmental and societal viewpoint and highlight the role of intensive salmon production in Chile and Oregon. Both landscapes are rich in diverse aquatic systems, which shape the landscape and are used by local communities and large commercial interests; aquaculture is the world's fastest-growing food sector. In Chile, non-native salmon farming threatens local pristine ecosystems through nutrient pollution, fish escapes, and competition with native species. In Oregon, hatchery programs have compromised native salmon due to domestication, genetic introgression, and competition. This course examines the intersection of intensive salmon production with environmental and societal values in both regions. Students will explore innovative, transdisciplinary solutions to ensure the management of sustainable aquatic systems, bringing enterprise into harmony with the environment and society. OSU Faculty: Dr. Ivan Arismendi (Fisheries and Wildlife Conservation Science)

Consensus and Natural Resources (FES/FW 485 – 3 credits): This course will explore the intricate dynamics between diverse stakeholders, resource management, and decision-making processes in the management of private and public land and related resources in Chilean Patagonia. Students will delve into the complexities of the utilization of resources, which impact various stakeholders differently. Through case studies, interactive discussions, and skill practice, students will examine the planning process, emphasizing collaborative approaches that seek consensus among diverse stakeholders with conflicting interests. Key topics will include sustainable resource utilization in forests and fisheries, conflict resolution, navigating difference, and the integration of ecological, social, and economic factors in decision-making. OSU Faculty: Dr. Kelly Biedenweg (Fisheries and Wildlife Conservation Science), Dr. Andres Susaeta Larain (Forest Engineering, Resources and Management).

Seminar (Course Number TBD – 2 credits): A weekly seminar will examine the theme of **Disturbance and Resilience** in the Patagonian landscape, ecosystems, and communities. Like the Pacific Northwest, Chile faces the ecological realities of active volcanoes and wildfire, as well as the growing impacts of climate change. Through meetings with researchers, public and private land stewards and community

members, we'll explore the innovative ways in which communities are meeting these challenges. Taught by faculty team.

Internship (FOR/FWCS/INTL 410 – 3 credits): For the last two weeks of the program, students will be placed in an internship related to their fields of study and professional interests. These placements will be in conservation, public park management, field research (biophysical and/or social sciences), community development, and resource related business/industry (e.g., ecotourism, sustainable aquaculture/timber management). The course also involves pre-internship research and assignments intended to deepen and enhance each student's internship experience. FWCS students can count this course as their intensive internship. Taught by internship coordinators (Shalynn Pack, Rachael Fahrenbach) and Michele Justice (OSU GO)

Note: Each course will also have one or more Chilean instructors, and OSU faculty will rotate involvement each year.