Field Studies in Northern Chile: From the Coast to the Altiplano

This interdisciplinary course will spend 11 days in Chile (2 days travel). Sites will be visited along the Chilean coast, the Atacama desert and Pampa del Tamarugal, and the altiplano (puna).

Day 1: Iquique
- Morning walking tour of the port city of Iquique, highlighting its role as a regional entrepot and former nitrate port.
- Free afternoon to explore Iquique. Alternate afternoon exploration of the old nitrate rail tunnels north of town (3hrs.)
- Dinner and overnight stay in Iquique.

Day 2: St. Laura – Humberstone – Mapocho – Huara
- From Iquique we will drive up to the Pampa del Tamarugal and visit the ghost town Humberstone and the old Nitrate factory Santa Laura and examine the nitrate mining history of northern Chile.
- We will visit the abandoned nitrate town of Mapocho and collect field data on the living situation of the mine workers.
- Dinner and overnight stay in Huara.

Day 3: Huara - Pisagua - Pisagua viejo - Junin - Huara
- Visit Pisagua exploring the town, lunch (local fish) in the Hostal La Rocca.
- Spend afternoon exploring Pisagua Viejo and Junin.
- Return to Huara, dinner and overnight stay in Huara.

Day 4: Huara – Pintados - Pica: Desert water resources
- Explore tamarugal forests in the Reserva Nacional Pampa Tamarugal
- Visit geoglyphs and dry salt lake Pintados, lunch.
- Visit desert farms near Pica (road side stop) and desert springs.
- Dinner and overnight stay in Pica.
Day 5: **Pica**
- Morning tour of the town of Pica.
- Free afternoon for exploration. Pica is a nice little town, with some nice little restaurants, a lot of fresh fruits and great fruit drinks, and a “cocha” a warm water pool in the middle of the desert.
- This is also an opportunity to have laundry done.
- Dinner and overnight stay in Pica.

Day 6: **Pica – Gigante de Atacama – Tarapacá – Chusmiza – Colchane**
- Visit *Cerro Unita* which is home to the largest pre-Incan geoglyph of the world (86m) the **Giant of Atacama**.
- Stop at overlook of Tarapaca, drive into Tarapaca to see petroglyphs; discuss pre-Incan human habitation of the desert.
- Stop at overlook of Chusmiza to see terraced farming.
- En route to the puna (altiplano), stops will be made to illustrate different climate and vegetation zones.
- Evening meal and overnight stay in a simple hostel in **Colchane**.

Day 7: **Water testing and exploration of the puna hydrologic system**
- Collect water quality data from a spring down to wetlands/bofedales to Salar Coipasa 9the second largest saltflat on the altiplano. Driving and walking.
- Dinner and overnight stay in Colchane.

Day 8: **Salar Surire**
- Travelling to the salt lake, we visit several small villages like Isluga and Enquelga, all are part of the Isluga National Park.
- At the salt lake Suriri, where three different species of flamingos are found. An optional bath in the natural hot springs of Polloquere, 4300m above sea level. Lunch at the hot springs.
- Dinner and overnight stay in Colchane.
Day 9: **Human-environmental interactions on the puna**
- In the vicinity of Colchane, will explore Aymara culture and settlement patterns, agricultural system, and village abandonment.
- Dinner and overnight stay in Colchane.

Day 10: **Puchuldiza geysers OR back-country trek**
- Either drive to the Puchuldiza geyser field or a hike on the Sendaro de Chile or Volcan Isluga.
- Students may be split into two groups if necessary.

Day 11: **Colchane – Iquique**
- Drive back to Iquique from 3800 meter above sea level. We will take time to explore the back-country, focusing on the geography and geology of the area.
- Lunch in Huara.
- Dinner and overnight stay in Iquique.