

From the Rockies to the Andes: A Comparison of the Human Impact in Arid Zones of the New World

This seminar will ONLY be offered in conjunction with the 4-unit companion class also entitled *From the Rockies to the Andes*. The majority of this class will be composed of field trips within New Mexico and a trip to Argentina during Spring Break. Together, these two courses provide a comparative study of human impact and natural history of two regions: New Mexico and Western Argentina.

This course will examine human life of both regions in the past and present. How have different cultural groups dealt with aridity? How has geography impacted human life and how have humans impacted their environment? What are the characteristics of water culture, from indigenous irrigation ways to colonial acequias and modern dams? How have natives and foreigners seen the culture and nature of both regions through narrative accounts? How are traditional folk medicine, products and food related to their own environment? What is the influence of different cultures and their contributions to the economic and social development of both regions? What is the role of both regions and their cultures in their respective national developments? What are the human aspects of biosphere reserves? What does human history of both regions teach us about the future of humanity in arid zones? In addition, in 2009 we celebrate the 200th anniversary of Charles Darwin's birth. What better opportunity to reflect on his legacy than following his route in Argentina and reading his *Voyage of the Beagle* in the exact places in the Andes Mountains where he was.

The combined classes provide a strongly interdisciplinary focus on the two areas covered. We will meet all day on Fridays to allow sufficient time for field trips in New Mexico. In addition, there will be one overnight field trip that requires participation on a Saturday as well as Friday. Travel to Argentina will be from March 12th– 22nd.

Previous application to the Program and acceptance is required to register in this course. For more information regarding application go to: www.unm.edu/~andes/ Students must pay a non-refundable deposit of \$600 at the time of acceptance into the Program and there will be a course fee of approximately \$1,600 due during registration. This fee will cover almost all expenses (except for a couple of meals) in nine days in Argentina as well as for transportation, museum entrances, and lodging in field trips in New Mexico.

Readings

A course reader will be provided on e-reserve. This will include a selection of accounts by scientists, explorers, and native peoples, as well as academic articles on culture and environmental history of both regions. In addition, there will be two books:

- *Voyage of the Beagle* by Charles Darwin
- *Seeing Things Whole: The Essential John Wesley Powell*, edited by William deBuys

Requirements

As always, students are expected to attend all classes, to prepare and complete all assigned readings and to participate in the class discussions and regular assignments. All field trips are mandatory. Each student will keep a journal throughout the class. This will act as a field notebook as well as a more traditional journal. There will be a final research paper and an oral presentation of that work.

This course fulfills 4 credit hours of Arts and Sciences group requirement in Social & Behavioral Sciences.

About the Instructor: Celia López-Chávez

Celia López-Chávez received her Ph.D. in history and geography with a focus in Latin American History, from the University of Seville, Spain. Originally from Argentina, she focuses her research on Latin American history and cultures. Dr. López-Chávez has taught and published in her specialty in Argentina, Spain, and the United States. She is currently working on a book about epic poetry, frontiers, and imperialism in Latin America. She is also co-director of the program *From the Rockies to the Andes* (New Mexico–Argentina).



F 8:30-11:00 SHC 12

From the Rockies to the Andes: A Biogeographic Comparison of Arid Zones in the New World

Mendoza, Argentina and Socorro, New Mexico lie at almost the same latitudes S and N. This field-based class will travel throughout New Mexico and will visit Argentina as we examine how this geographical reality impacts the two regions. We will cover several topics: geology and evolutionary history of the two regions, physical geography, biogeography, biodiversity, land use and water resources. Students will learn about climate as well as landforms and will become familiar with such concepts as physiographic provinces, biomes, convergent evolution as they work in the two locales. Both regions have biosphere reserves that will be an important part of the field study (Jornada in New Mexico, and Ñacuñán in the province of Mendoza, Argentina). This class will also provide an opportunity for students to learn basic ecology field techniques as they compare regions and assess the diversity found in each.

In addition, we will observe the 200th anniversary of the birth of Charles Darwin (Feb 12, 2009) by exploring his connections with Mendoza and other parts of Argentina. We will read sections of his writings and will visit at least one site that he mentioned, when we climb up into the Andes on the way to the Chilean border.

This seminar will be offered ONLY in conjunction with the 4-unit companion class also entitled "From the Rockies to the Andes." The combined classes provide a strongly interdisciplinary focus on the two areas covered. We will meet all day on Fridays to allow sufficient time for field trips in New Mexico. In addition, there will be one overnight field trip that requires participation on a Saturday as well as Friday. Travel to Argentina will be from March 12th–22nd. We will not meet for at least two weeks during the second half of the semester, but there will be class for 3 hours during the last three weeks to allow for student presentations. These classes will meet from 9-12 each Friday.

Students must pay a non-refundable deposit of \$600 at the time of acceptance into the class and there will be a course fee of approximately \$1600 due during registration. This fee will cover almost all expenses (except for a couple of meals) while in Argentina as well as for several field trips during the semester.

Readings

A course reader will be provided on e-reserve. This will include writings by such authors as Josiah Gregg and Ricardo Ojeda, as well as classic papers in biogeography

and ecology. In addition, there will be two books:

- *Voyage of the Beagle* by Charles Darwin
- *Seeing Things Whole: The Essential John Wesley Powell*, edited by William deBuys

Requirements

As always, students are expected to attend all classes, to prepare and complete all assigned readings and to participate in the class discussions and regular assignments such as lab reports or worksheets. Each student will keep a journal throughout the class. This will act as a scientific notebook as well as a more traditional journal. There will be a final individual research project with a paper and an oral presentation of that work.

This course fulfills 4 credit hours of Arts and Sciences group requirements in Physical & Natural Sciences.

About the Instructor: Ursula Shepherd

Dr. Ursula Shepherd will bring to this course her experience in international programs, her background in ecology, evolution, and biogeography of the region and of arid landscapes in general, her love of the writings and works of Charles Darwin, and her training in research techniques.

About the Student Teacher: Jes Martin is currently working towards a B.S. in biology at UNM. She is a proud veteran of three UHP study abroad programs, and is pleased to make this her fourth. She is interested in biogeography, ecology, and conservation and plans to pursue a Ph.D. after a long hiatus from school spent traveling, hiking, and playing music.



F 12:30-3:00 SHC 12