

HISTORICAL GEOLOGY – fall 2016

Professor: Dr. **Alessandro Grippo**, Ph.D.

FIELD TRIP: **Friday, February 6, 2015: Coso Red Hill & Red Rock Canyon, CA**

MEETING POINT: loading space by Physical Science building at 7:30am

Purpose of the trip

The purpose of this trip is dual: to observe recent deposits in their sedimentary environment; to study rocks trying to interpret the original environment of deposition. At first we will observe a modern sedimentary environment and its deposits to understand how sedimentation reflects environmental change in space; we will study recent deposits, from source to sink, identify rocks, their textures, their sedimentary structures, their sedimentary bodies, their colors, possible evidence of biological activity, possible fossils. We will analyze and interpret the facies change in our environment. We will describe what we see and take field notes and photographs.

Later on, we will visit a series of outcrop where we will be making observation on sedimentary rocks, looking again for all the properties listed above and, based on the principle of Uniformity, trying to decipher the original environment of deposition.

(depending on time, we might reverse this schedule)

A tentative list of what to bring in the field

Field Tools: A field notebook, a pencil and an eraser. An ink pen. Color pencils. Marking Pen - e.g. Sharpie. Ruler (metric and standard) for field. Hammer. Pouch for carrying pencils. Hand Lens.

Impermeable case for notes/drawings etc. Plenty of plastic Ziploc bags or clothed collecting bags for samples. Remember that there is ABSOLUTELY NO SAMPLE COLLECTING within the boundaries of the State Park(s).

Personal items:

Sturdy comfortable Field Boots or Shoes (no heels, no open toed sandals – beware of cacti, yuccas, sharp rocks, etc.). Clothing: bring light-colored, long-sleeved cotton pants and your choice of long-sleeved or short-sleeved t-shirts for the day; bring also a sweater or something comfortable for the late afternoon/evening in case temperatures drop. We will verify weather conditions before departure. Bring hats with a brim, bandannas, backpacks for carrying gear and samples.

Cameras or Video cameras (bring enough memory cards or film, and batteries/battery charger with car adapter). A cell phone for emergencies (to be turned off during field class hours). If you have a small drone, you may bring it for educational purposes.

There will be no water available. So, think about how much water you need for drinking, and add some more. We might dry up quickly and will need to remain hydrated.

Food and more:

Bring food for lunch (sandwiches) and water (or drinks of your choice). We will be travelling in the desert. Make sure to bring and always carry with you plenty of fluids (water). We will never be too far from cars anyway, so just carry what you need at all times. ABSOLUTELY **NO ALCOHOL** allowed, and no smoking or drugs during the trip, including inside vehicles.