

## Weeks 6 & 7

### The Final Study Area – Putting it all together

The last project of G429 is the final study area, a seven-day project that is designed to let the students do a detailed geologic analysis of a relatively large area. Students are assigned to one of four final study areas. Each final study area covers at least 10 mi<sup>2</sup> and is equally challenging. Six days of the project are spent in the field, mapping and making geologic observations. The last day is spent in camp finishing the geologic analyses and report. Geologic analysis typically requires multiple internally consistent geologic cross-sections that tie together with the map and each other plus a thorough description of the geologic history. The project results are delivered as a field study report similar to a USGS publication or a publication ready manuscript for a journal. The report includes:

- a. The basic description (written descriptions, maps, cross sections, etc.)
- b. Appropriate geologic analyses (stereonet, cross-cutting relationships, detailed discussions about specific geologic features, etc.)
- c. How the geology of the final study area fits into the context of western North America:
  - i. Deposition of sedimentary rocks;
  - ii. Structural styles;
  - iii. Tectonic history;
  - iv. Igneous activity, metamorphism, etc.
- d. Specific topics of interest to the student and proposed future work to address those topics.

Products are turned in sequentially during the last few days of the final study project to facilitate getting everything completed in the allotted time

