**Final Project and Powerpoint presentation (worth 200 points)**

This assignment will be presented in either the last class meeting or the final exam period at the end of the semester. The assignment is to make some structural observations and measurements, or even a small geologic map, for any nearby geologic locality (of your choosing) and explain the geometry and deformation and interpret it in terms of geologic history and geologic processes.

You will prepare and make a presentation using Powerpoint or equivalent (see the following instructions for more detail). Your presentation should consist of several slides of figures, a brief summary, and summary phrases outlining key points about your research project. It will be evaluated on content/effort, organization/clarity, grammar/spelling, and the verbal explanation. The graphics can be anything (cartoon, sketch, simplified geologic cross-section, geologic map), but should be something you illustrate yourself. It should be neat, perhaps colored, but need not be drafted (you can take a picture or scan a sketch and put that into the slide).

The next page shows some possibly interesting study areas around greater Phoenix.
Suggested Phoenix region study areas for GLG310 research projects*

*Note that the areas are generally denoted where you might find some nice geologic relationships and structures to map, but I don't expect you to map the entire area.
Powerpoint Presentation Instructions and Suggestions

UPDATED

Format
- Illustrations and summary phrases on no more than 5 Powerpoint slides. See this link for some ideas about how to be careful with your Powerpoint presentations:

Content
- The core of the presentation will be illustrations and summary phrases that convey the main points. **Make sure to answer the question: why is this important?**
- Organize your summary phrases onto by clear categories. Some possibilities include (but you won’t need all of these):
  1. location and geographic/geologic setting,
  2. objectives of the study,
  3. what data you collected,
  4. discussion of your results and what they mean (this could be several lists),
  5. inferred geologic history,
  6. how what you observed fits into the regional geology,
  7. suggestions for future studies,
  8. conclusions/implications, and
  9. anything else that suits your particular study.
- Use a spellchecker and proof your text *after* you prepare it, for spelling & grammar.
- Figures are essential and are the foundation of any geologic presentation. Some figures could include:
  1. location map,
  2. figures showing the regional geologic setting,
  3. topographic map with your data,
  4. geologic map,
  5. topographic profile or geologic cross section,
  6. structural figures, such as stereonets,
  7. graphs, plots, or tables of data
  8. sketches done in the field or redrawn,
  9. photographic prints or print outs of digital photos,
  10. cartoons showing sequences of events or the geologic history, or
  11. anything else you think helps convey the story

Presentation
- You should prepare to give a three-minute presentation that highlights where you did the study, what you did, what you found, and what it means. **We will be very strict on the timing, so please practice!**
- Use the presentation as your focus and point to figures as you go, but don’t read it to the listener. You are simply trying to convey the main points and spark interest.
- You can bring props, such as rocks and other things.
- We will be using our classroom. You will need to get your presentations to us in advance.
- We will use the last two class periods (December 5 & 7) for the presentations.
Suggested General Presentation Outline

NB: You are not allowed to use outside sources/references. All observations and interpretations must be your own. There are no “right” or “wrong” interpretations, just as long as they make sense geologically and are consistent with your observations (mapping, attitudes, sketches, figures, etc.).

- Summary

- Introduction
  - Where
  - Why
  - What is the objective of your investigation / report
  - What is to follow

- Main Body
  - Rock descriptions
  - Structures

- Interpretation
  - Geologic history
  - Structural processes (Faulting, Folding, etc.)

- Summary/Conclusions

Keep observations separate from interpretations
(Refer to maps, cross sections, and sketches.)
Tie back to specific observations.