

Instructions for Field Geology I Spring Break Paper

For the Arnett Creek project, you are required to write a three- to five-page paper about the geologic processes and history of the area. For this report, you will turn in the following:

- (1) a rough draft with review comments from two of your classmates or other geologists (reviews must be signed);
- (2) a final draft with clear evidence that you have incorporating valid suggestions from the reviews (not just a signed copy of your final draft or some other attempted illusion of a review); and
- (3) at least two figures (not included in the page limit). One figure must be a properly *constructed* (not sketched) cross section drawn with no vertical exaggeration; it needs to have a complete legend, scale, etc. The other figure(s) can be a nice sketch, schematic cross section, evolutionary diagram, stratigraphic column, etc. These do not have to be drafted, but need to be neat and readable. A digital photograph does not count, unless the photograph really tells a key aspect of your story and also if you use Illustrator, Photoshop, or a similar program to label aspects of the photo.
- (4) You must turn in your original field map!!!

A typical outline for such a paper is as follows (but you can organize your paper in whatever way makes most sense for what you are trying to emphasize; see also chapter 16 in Compton):

- **Introduction:** says where the study was conducted, what you did, and gives the reader some idea of what the report will be about
- **Geologic Setting:** this may give a short summary of the regional setting or more likely just gives an overview of the field area (what rocks are where, how they generally dip, and the main types of structures, etc.)
- **Rock Units:** an intro (topic) paragraph about what rock units are present and then a general description of each rock unit, usually done from oldest unit to youngest
- **Structural Geology:** Describe the main structural aspects, such as dips of units, faults, folds, etc. Would include the sills here.
- **Discussion:** Discusses the more interesting conclusions you reached, summarizes the geologic history of the place, etc. You have lots of possible ways to proceed here. In addition to the geology history (note ambiguities and what these say about the regional geologic processes that were occurring), consider topics such as how the sills work, what the faulting was doing what drove it, and other interesting things you noted.

For such a short paper, you probably won't need to include an abstract.

Content will be most important, followed by how well your paper is organized and written, and how the figures helps illustrate your paper. Read the previously handed-out *Editing Codes and Writing Tips* sheet from top to bottom and make sure you understand each of the grammar errors listed. Read also the other suggestions for improving your writing available here:

<http://www.public.asu.edu/~arrows/FIELDI/GLG451--Writing.html>. Think about the organization of each section before you start writing the paper, and start each paragraph or new section with a topic sentence. Print out the paper to proof it (never proof it only on the computer screen), and read the paper out loud to yourself before you submit it to others for their comments and before you turn in the final draft.

The paper is due Friday, April 20 by 5PM.