GEO-SCI 587 Laboratory Expectations

General:
The laboratory portion of this class will explore various techniques and phenomena of hydrogeology. During each lab and small portion of the lab will be dedicated to explanation of the lab itself. 25% of your grade for this class is based on your performance in laboratory. Thus, your attendance in lab is required as no makeup laboratories will be performed. If there is an extenuating circumstance, then we can discuss makeup options.

Writeups:
Your laboratory write-ups should be in the form of written reports, or papers. By “paper”, I mean full sentences, good spelling and proper grammar (the majority of your grade will be based on content and understanding, but spelling and grammar will count as well). Although a bulleted list or two may have its place in a report, the report should use PARAGRAPHS, not simply be a giant bulleted list. A “report” consisting only of bullets is not acceptable. The text of your reports must be prepared on a computer; graphs or sketches may be prepared either on the computer or by hand.

Unless you are informed otherwise, each write-up should follow this basic outline:

Purpose: A brief summary of the main reasons we did the exercise. This can sometimes be accomplished in as few as two sentences.

Methods: A brief summary of the experiment. Although you may have had other laboratories in the past where you were required to copy lengthy procedures into a laboratory manual verbatim, this is not the intention here. You should summarize the important points, but don’t need to describe every single detail.

Results and discussion: Give the results and discuss them.

Conclusions: A brief summary of the most important points the laboratory demonstrated.

Please note that, in addition to questions or problems at the end of a laboratory, ALL underlined passages in the handout must be addressed in your report.

Here are some other rules to follow:
-Show your work
All graphs should have proper axis labels, with units provided (*exempli gratia* “Time, min” is good, but “Time” isn’t).

Write out all formulae symbolically before using them to calculate answers.

We are scientists, and thus use the “metric” system, in large part because it provides us the opportunity to say things such as ‘yottagram’ and ‘femtometer’ that other systems of measurement don’t. There may be one or two exceptions during the semester when you will be allowed to use units like ‘acre-feet’ (the most commonly used term in irrigation, river management and a couple of other fields), but don’t try to measure anything in inches, or you may receive an ‘F’ right on the spot.