**GEOL758 – Analysis of Geologic Data – Spring Semester 2013**

**CLASS TIME:** M, W 8:30-9:50, SUM 241

**INSTRUCTOR:** Scott White, 777-6304, smw@sc.edu, EWSC 314
Office Hours: Thursday, 2:30-3:30 AND other times by appointment

**TEXTBOOK:** none, Assigned reading will be provided via Blackboard

**LEARNING OBJECTIVES:** At the conclusion of this course, students should be able to:
1. Make informed decisions about proper handling of geological data in a research setting.
2. Understand how scientific data can be used and misused.
3. Be aware of a suite of tools available for geological data analysis.

**Course Grading:**
3 Projects (~4 weeks each) 75 points (25 points each) : 2-D, 3-D and presentation
Final Exam 15 points
Class Participation 10 points

As per University Policy, there is no such thing as an “excused absence” from class. If you must miss class, you will need to get any material or announcements from a classmate.

**Topics Covered:**
Experiment Design & Data Collection, Analysis of Data Interpretation, and Data Presentation
Univariate data, 2-D data as a time series or spatial profile, 3-D data and contouring, and Spatio-temporal 4-D treatments.

**Motivating Philosophy:**
“To be worthy of its name, every physical theory should contain within itself the means not only of predicting the relevant quantities, but also of predicting their uncertainties” - *Sir Harold Jefferys (1938)* [second hand quote]