GEOL758 – Analysis of Geologic Data
Spring Semester 2011

CLASS TIME: MWF, 11:15-12:05, SUM 241
INSTRUCTOR: Tom Owens, 777-4530, owens@sc.edu, EWSC 502
Office Hours: Mondays, 1:30-3:30

TEXTBOOK: none, Readings from the literature and other sources will be provided

LEARNING OBJECTIVES: At the conclusion of this course, students should be able to:

- Make informed decisions about proper handling of geological data in a research setting.
- Understand how scientific data can be used and misused in research
- Be aware of a suite of tools available for geological data analysis

Course Grading:

3 Projects (~4 weeks each)	75 points (25 points each)
Homework & Tooltime Exercises	15 points
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

Tools and available resources

Take-Home Message:

"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]*

"There are known knowns. These are things we know that we know. There are known unknowns. That is to say, there are things that we know we don't know. But there are also unknown unknowns. There are things we don't know we don't know."
- *Donald Rumsfeld (2002)*

Uncertainties are a discomforting dimension of the sciences.