STAT 518
PROJECT DESCRIPTION

The goal of the project is to develop a suitable model for some aspect of a set of data, or the development of some methodology appropriate for stochastic models. The model should take into account aspects of the physical situation underlying the data. Statistical methods of checking the fit, estimating parameter, etc., should be employed.

Everyone will give a talk on their project, some time during week 10 of the quarter. The oral presentation will be about 20 minutes long, and should concentrate on describing the data and the essential parts of the model. Avoid details, to the extent possible. Graphics are encouraged.

The written report, which should not exceed 15 pages, including graphics, will be due by May 27. A preliminary outline should be approved by me by April 15. The report should contain a description of the problem, a description of the data, motivation for the model, discussion of the methods and quality of the fit, and conclusions **with respect to the scientific problem of interest**. Put calculations, tables, and figures in an appendix, unless they are essential to the argument in the body of the text. The appendix does not count towards the page limit.

Criteria used to judge performance will include the following factors:

* the validity of the analyses and models which underlie them
* the thoughtfulness and simplicity of the approaches.
* the quality of the written report. The report should be carefully organized and should be clear and accurate. Simple, telegraphic (even graceless) prose is preferred to sentences and paragraphs which are convoluted or otherwise confusing.
* the technical execution of the analysis, as evidenced by selection and application of software.