Math 466, Spring 2003

Project Proposal

Due Wednesday, April 30.

Turn in a one or two page description of what problem you plan to work on for your project, what references you plan to use, and what computational work you plan to carry out.

The project should involve numerical analysis and, in most cases, some computation. It can be a more in depth look at some topic that we have or will cover in class (for example, the FFT), or it can be on a topic that we will not cover in class (such as multigrid methods). *It should be interesting to you and fun to investigate.* If you are unsure about your project topic, you can find ideas in various places:

- Books on reserve for this course and other reference books in the library. Or browse the internet for numerical analysis topics that you might find interesting.
- ACMS seminar. This seminar meets Friday afternoons at 3:30 and has speakers from a variety of different fields talking about their work at a level accessible to undergraduates. Many of these talks involve some numerical analysis and computation.
- The Mathematical Contest in Modeling held every year typically has problems that involve not only mathematical modeling but numerical solution of the model created. This year UW had two winning teams in this contest! The winning papers can be found at: `www.math.washington.edu/~morrow/mcm/mcm.html` and the contest home page can be found at: `www.comap.com/undergraduate/contests/mcm/`

Further guidelines about the project paper will be given out next week, along with feedback on the project proposals that you submit. The lengths of project papers may vary, but a substantial project probably will require about 8–10 pages of text, along with supporting figures, data, and, perhaps, *as an appendix* computer code listings.