EE 277 Computer Project 5
Multidimensional Methods

Part I Due: 5 PM, Tuesday, November 27, 2001.
Part II Due: 5 PM, Tuesday, December 11, 2001.
Presentation Slides Due: 3 PM, Wed., December 12, 2001
Final Presentation: 9 AM – Noon, December 13, 2001

Write a computer program (in Fortran, C, Matlab, etc.) to solve the problem you proposed in Project 4 for two- or three-dimensional problems.
Following requirements must be met:

Part I: Formulation and Report

1. Formulate the problem using the method you proposed.
2. Include details of your derivation in your report.
3. Typeset the report for this part using a word processor (LaTex, TeX, Word, etc.).
4. Send your report to the instructor by email before the deadline.

Part II: Coding, Results, and Final Report

1. Write the computer code (in Fortran, C, Matlab, etc.). Debug your code.
2. Validate your results as much as possible. Include at least one case of validation in your final report.
3. Use your code to model at least two cases. Include these results in your final report.
4. For all the above cases, include the input files and the codes to run these cases. Write a README file to explain these cases so that the instructor can reproduce your results by running your codes.
5. The codes and the cases should be submitted to the instructor by the deadline through email (qhliu@ee.duke.edu). The submitted package should include a README file explaining your files and how to run to obtain your results.
6. Include the report in Part I, your results, and conclusions in your final report.
7. Submit the electronic form of the final report by email.
8. Submit a hard copy of your final report by the deadline.
Part III: Slides and Final Presentation

1. Prepare 8–10 slides in Powerpoint, Postscript, or PDF format (the last two can be generated by LaTeX or TeX, or other word processors).

2. Send by email the file of your presentation to the instructor by 4 PM, Wed., December 12, 2001.

3. Make a presentation for 10–15 minutes between 9am–noon (the final exam schedule). The instructor will bring a laptop and a computer projector for the presentations.

Note

• Please come to discuss with the instructor if you have any problems with the project.