GUIDELINES FOR FINAL PROJECT

For your final project, you should answer the questions provided in the handout (or the questions agreed upon with me) and give an oral presentation. Half of your grade will be based on your written solutions and the other half on your oral presentation.

1 General Guidelines for Oral Presentation

Each student will have 15-20 minutes to make their presentation to the class. You should practice your talk several times to insure that you meet the time requirements. The use of time will be one factor taken into consideration when computing your grade. There will be a limit of three minutes for questions after each talk that is not included in your 15-20 allotted minutes for your presentation. You should use either overhead slides or a PowerPoint or your presentation. You should have any computer presentations preloaded at the beginning of class.

Please do not read your presentation. Use note cards or an outline to "talk through" your material. You may want to ask questions of classmates as you go along or relate your work to that of others but beware of the time limits. Speak loudly and clearly and make frequent eye contact with your audience.

Each talk should be presented at a level so that a student who has completed vector calculus can easily follow your material.

2 Some Suggestions for Slide Preparation

1. The purpose of slides is to save time, increase interest and attentiveness, clarify or emphasize an idea, and increase audience recall of presented information. Be sure your slides effectively accomplish your desired goal.

2. The most common problem with slides is overcrowding. The print on a 2" x 2" slide should be readable without magnification. To help simplify slides consider the following:

   (a) Convey only one main idea per slide.
   (b) Express ideas in as few words as possible.
   (c) Instead of one complex slide make several simplified slides with a conclusion slide describing the overall concept.
   (d) A good general rule is not to exceed six lines, or 45 characters and spaces per line.

3. To prepare slides that are successful in generating and holding attention, consider the following:

   (a) Use slides with contrasting colors or negative slides.
   (b) Minimize clutter.
   (c) Don't try to tell the whole story on one slide.

   Remember, don't put yourself in a position to have to apologize for your slides. If you must introduce a slide by saying "You may not be able to read this, but ..." please consider not showing it.

3 Content of the Presentation

The following is a sample guideline for the content of your presentation.

The oral presentation should be a concise statement of your research problem, a summary of the results you achieved, and a prognosis of your work. You should talk about the content of the project, including definitions, mathematical results, and other material fundamental to the project. Target your peers in the class as the audience for the presentation.

You might want to organize your talk as follows:

1. Title Page

2. Outline: Provide an outline of what you plan to present. This will help both you and your audience understand the structure of your talk.

3. Introduction: The purpose of this section is to Give Background Information. You need to tell us what the problem is and give an overview of the project (e.g. purpose? motivating problem? goal?). Don't put details here!

4. Body: The body of the talk is your chance to tell the world about your topic. Put details here - not all, but enough so that we understand the heart of your problem. Again, know your audience; state more than simple facts but you don't need to go into messy details. Define any unfamiliar terms and be as orderly as possible. Describe any problems that arose and the methods used to solve them. This is the main part of your talk and will vary depending on the project. NOTE: Some of you might find in some cases that it is more logical NOT to use the outline provided in the project.

5. Conclusion: This is a wrap-up. You should tie everything together. A brief summary of the main points is sufficient. You might also mention possible follow-up questions and/or problems.
Be prepared. Solid preparation will give you self confidence. Do not worry how you sound, look and feel. Keep your mind on the business of getting your ideas across to your audience. Try to remember that your listeners are your peers and they want you to succeed!

4 Grading

I will grade the oral presentation on

1. 85%: Correctness and completeness (explanation of the problem, conveying an understanding of concepts and the work involved, summary of the results (including theorems and conjectures), and suggestions for future work)

2. 15%: The organization and style of the presentation (clarity of the presentation, including format, delivery, and "readability" of visual aids and/or board work)

5 Some Extra Things to Consider...

• You can treat this presentation as something you would present and give to your boss. You should assume that I, your boss, have some knowledge of the business, but I am not knowledgeable of all the details concerning your particular project.

• The presentation should be professional looking. Remember, I am your boss and your promotion will be based on your presentation.

• In general, try to keep it simple. Do not add any distracting graphics or sound effects. If something does not help support your results, then I most likely don’t want to see it.

• Do not put too much in your slides. You want to be simple on the slides and heavy on the explanation.

• Do not read from your slides. You should not need your slides to do the presentation. They are for your audience not for you. It might help if you made note cards or printed out your portion of the slides (print them out 6 to a page and they will be like note cards)

• One last thing, you want to make sure that you stress the big picture first. After you have clearly convinced us that you understand what is happening, THEN you should explain the details.

• Feel free to make an appointment to meet with me and go over your presentation. I will make sure that you have the correct results and that you are on the right track with your explanations. Do not wait until the last minute to do this, as you may have to make changes.

• For some excellent suggestions on giving a good technical talk, go to http://www-users.cs.umn.edu/~baoquan/talkguide.html