## Group Project Policy

## Writing in Mathematics

In academics, being able express your thoughts in a way that can be understood by others is essential. This is especially true in the scientific fields since mathematicians and scientists must explain abstract concepts to people outside of their fields. By writing in Math 120R, you will be able to present your work in a clear and organized fashion. In addition, writing solutions to problems will provide you with a deeper understanding of the concepts discussed in class. Moreover, writing will enable me to understand the concepts that have remained unclear. Below are some guidelines that will be used when grading your work.

- 1. Write as if the reader does not already know what you are want to say: Assume that whoever is reading your work does not know how to solve the problem. Keep in mind that the reader can only see what you have written, not what you meant to write.
- 2. Focus on the process and not the final solution: Clearly describe your thinking. Focus on the logic behind the steps of a problem and not the computations.
- 3. Use an easy-to-read format: Use complete sentences, write legibly, be concise, and organize your work in a logical manner. Also, please leave plenty of room on your paper for my comments.
- 4. Avoid vague words like "it": Most problems contain many quantities. "It" does not tell me which quantity you are referring to. Consequently, I cannot give you credit. Something that is clear to you, has to be made clear to the reader in order to receive credit.
- 5. **Define any symbol you used that was not introduced in the problem**: For example, if you want to use the variables l and w to represent the length and width of a rectangle your writeup should include a sentence similar to: "Let l and w equal the length and width of a rectangle". Also, the variables you use should make sense in the problem. Do not use the letters x and y in an equation unless the variables they represent are something like xylophones and yams.
- 6. Use complete and proper mathematical notation: Always use units on your answers and label graphs completely.
- 7. Each paper should be written so that anyone familiar with precalculus could pick it up and understand the paper. The paper is not a list of answers. It should be written in complete sentences and the ideas of the report should flow. Be sure to include an introduction for the reader. The introduction should include an explanation of what the lab is about and the mathematical concepts involved. Length is not important but you must convince me that you and your group understand the concepts. You also should include a conclusion which sums up the results of the lab found by you and your partners.

## Grading of the labs:

The grading of the project will be based on a 50 point scale where 20 points are awarded for mathematical correctness, 20 points for the explanations provided by the group and 10 points for style.

Mathematical correctness: Points are awarded according to the correctness of the equations found by the group, using variables that make sense in the context of the problems and correctness of all computations made throughout the lab.

**Explanations:** Points will be awarded according to how well the group explained all variables and parameters and how well your group explained the goals and conclusions of the paper. To receive points for this part, you need to carefully and accurately explain every part of the lab.

**Style:** Points will be awarded according to how well your group has written and organized the paper. Remember, this is a paper. Points can be deducted for spelling error, grammatical errors and poor writing. The organization of the paper is also of great importance. Your ideas should flow, there should be an introduction and a conclusion. A paper is not just answers to questions.