**Linear Algebra Group Project**

**Math 240**

The purpose of this project is for your group to come up with some "real life" application of linear algebra. You are being asked to come up with and explore an application that involves the concepts we are learning in this course. Most of you are required to take this course for your particular degree -- why is that? An excellent source of information would be to go to one of the instructors in your area and ask them to help you find an application of linear algebra that you might someday encounter. I would encourage you to use Maple or the Internet on this project. Another excellent source of information is our own textbook. There are several sections in our text that address applications of linear algebra that we do not have time to cover. Any of these sections would be a good starting point and might give you ideas for topics for your project. These sections are:

1.8

2.4

5.3

6.5

There are also many applications on the Internet.

You will be expected to turn in a paper at least 2 pages in length (typed, double-spaced, standard margins) and also to present this project to the class on one of the last three days of class. The grading of this project will be determined by your introduction and development of the topic, the relationship you describe between your topic and linear algebra, your conclusion, your general writing (including grammar and spelling so be sure to have proofread and edited it before you turn it in), and your class presentation. Note that I am not asking you to solve problems, I am asking you to show how the problem can be converted to a linear algebra problem. Please feel free to talk to me about anything concerning your paper.

**The paper is due Dec 2, 2008. Presentations will be the last three days of class.**