

Midterm Exam - Project I
Ma623 Stochastic Processes
due Tuesday March 23 2010

For this project please think of a problem (any problem) that would necessitate the use of Stochastic processes. Please think big - solving the problem is not necessary at this time. The problem has to be related to a real life situations. I would suggest to identify an area of interest for you and within that domain think about a relevant problem.

First page(s) should contain the description of the problem and all the issues that you can think of, which are related to the specific problem presented. DO NOT HAVE ANY MATHEMATICAL SYMBOLS ON THIS PAGE. Everything should be presented using simple English language.

On the *Later pages* you should attempt to use mathematical symbols and language that we learned in this class to rewrite the problem. It is not important that once you write it in mathematical terms you cannot solve it. The important issue is HOW to write it. Pay attention to all the issues you wrote on the previous page. Think: do the mathematical notions I created address all the issues I raised? Change and redo all the symbols and mathematical assumptions if this is not the case. IT IS EXTREMELY IMPORTANT NOT TO THINK ABOUT THE SECOND PART WHEN YOU WRITE THE FIRST PAGE(S) (PROJECT DESCRIPTION).

That is all. You will be judged on the basis of the *complexity* of the problem on the first page and on the way you attempted to put it into mathematical terms on the second page. You do not have to be 100% correct but you should raise the issues and ask yourself when you identify parts of the problem which are hard to model. The work should be original, any references to outside work should be properly documented.

Everything should be typed. Please use the formatting software or typewriter of your choice.