Due: Friday, March 12th (in class)

Each group needs to find a topic for their project. You should have preliminary discussions amongst yourselves and decide on a theme, to be approved by the instructor, by **Friday, February 26th**.

Once you have settled on the problem, you must produce a *proposal*, which is a short document describing what the problem is, why it is worth solving, and how you plan to study it. The proposal should be no more than four pages long, and treat the following issues.

1. Describe the problem to be solved.

2. Explain the significance of the problem, that is, why it is worthwhile to solve it. As part of this, you will identify stakeholders, that is, people who are affected by the issue and the proposal.

3. Describe how you plan to solve the problem. In particular, outline inputs that the model will have available, and the outputs that it should produce. Explain what relevant data needs to be obtained, and how it will be obtained. Outline the computational techniques that you plan to use to solve the problem.

4. Discuss additional aspects of the problem that are not treated by the model, and explain why it is acceptable to focus only on the aspects that you did.
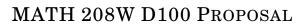
Recall that the model should be such that you can apply non-trivial mathematical (Operations Research) techniques to it to give a detailed, quantitative and verifiable answer. You also should identify a reasonable data set that you can use.

The proposal will count for 25% of the project grade, i.e. 5% of the final grade. The draft marking rubric is on the back of this page.

Presentations

Besides the written proposals, we will have short 10 minute presentations of the proposals to the class. Overheads must be submitted electronically to the instructor by 11:59 p.m. the day before the presentation, i.e. **Thursday, March 11th**.

The problem is clearly identified and presented. (10%)	
Motivations for the problem are clearly stated, including identifying relevant stakeholders and discussing possible impacts on them. (10%)	
There is a clear, feasible plan to obtain the relevant data and then solve the model. (15%)	
The modelling and solution techniques proposed are neither trivial, nor intractable, and are Operations Research techniques. (10%)	
The discussion of additional aspects not treated by the problem is thorough, and the reasons why these aspects are ignored are well-argued. (10%)	
The writing style is appropriate. (5%)	
Ideas are presented clearly and logically. (5%)	
Few grammatical, spelling and punctuation errors. (5%)	
The report is well-formatted. (5%)	
Live presentation is well prepared, accurate, and professionally delivered. Questions are answered appropriately. (10%)	
Overheads are clear, well-formatted, and have few errors. (5%)	
The presentation highlights critical aspects of the report, and is suitable for the audience. (5%)	
Individual participation and contribution. (5%)	