ELEC 573 COURSE PROJECT

1. The course project is an important part of ELEC 573, and is worth 30 % of the course credit. Past experiences have indicated that the student can learn the subject matter effectively through course projects when some optimization problem of moderate scale in his/her field of research can be identified, analyzed, and solved using the methods and algorithms developed in the course.

   To start, you should make an appointment with the course instructor to discuss the project topics so as to assure suitability of the planned project.

2. In case no project of that nature can be identified, you should contact the course instructor as early as possible so that he will suggest a project topic for you.

3. Your work should be summarized in a project report which typically consists of a brief introduction of the problem, a section that describes how the problem at hand was converted to an optimization problem, a section to describe how the optimization problem was solved in terms of the algorithms used, convergence rate, computational complexity, and possibly a comparison study (computer simulations are usually included and discussed to support your analysis), a conclusion section, references and, if necessary, an appendix to include the MATLAB code used. The length of a report may vary, with the norm in the range of 20 - 25 pages.

   You are strongly encouraged to propose and materialize a constrained-optimization relevant and innovative project and to carry it out to their completion independently.

4. Evaluation Method:

   Originality: 25 %
   Potential significance: 25%
   Work independence: 25%
   Writing: 25%

5. Due Date: The same day when the final exam takes place.