For this course you are required to complete a research project. This document describes the requirements and deadlines for the written report and guidelines for the evaluation of your project. A separate document containing a list of projects and projects taken can be seen at:

http://www.caе.wisc.edu/~saluja/ECE753/INFO.html

You are not required to choose your topic from the list. Instead, you are encouraged to formulate a problem of your own in a topic of your choice.

Your term project should comprise of either a thorough survey of a topic, a design, development, implementation of a fault-tolerant algorithm/scheme, or modeling/analysis of a fault-tolerant system. You will find relevant reference materials in the books reserved in the library, the papers collected in the course pack, and/or the papers that appear in conference proceedings and archival journals. Some reading and thinking is necessary in order to select and properly assess a project.

1. Project Choice and Team

Each team will comprise of two students, but not to exceed three students. Only in very exceptional cases one student project will be assigned. Students making a more than two-student team must discuss this with me a priori. I would like to see that each team has a project topic chosen by March 4. You must discuss your choices with me. I would like to have an email confirmation of your choice of the project for my record.
2. Proposal

Submit a short proposal (one to two typed pages maximum) by Thursday, March 6. Projects will be approved based on the quality of the proposals. You should submit the following:

- Tentative title
- Names of the proposers (team members) and their email addresses
- Project outline:
  
  **research or design oriented project** problem statement/formulation and motivation, background materials, objective(s) to achieve, possible method(s) of attack, and any pertinent information you would like me to know.

  **survey project** problem statement/overview, background materials, description of existing algorithms/schemes, the way you would like to survey/compare them (e.g., with respect to some performance measure or implementation overhead), and possible enhancement of existing algorithms/schemes.

- Time schedule listing dates of major “milestones”.
- Work division between the two–person project team members.
- References (list only those actually consulted in preparing the proposal).

3. Progress Report

A one to two page written progress report is due Thursday, March 27. This should summarize how the project is progressing, describe any unexpected difficulties encountered, and describe any major changes in the project plan. Feedback will be provided only if progress is not satisfactory at this point in time.

4. Oral Presentation

The last three weeks of lectures in the semester will be devoted to project presentations and/or demonstrations. You will be expected to give a 35–40 minutes presentation during that period. Your project report and your presentation will be graded. Try to highlight your ideas, be concise, clear and to the point in your presentation. You are encouraged to prepare a powerpoint presentation.

You will also be required to submit a copy of your presentation.
5. Written Report

The written project report and a softcopy (in .doc, .pdf, or .ps) is due latest by Monday, April 28. However, if you can get the report to me a few days before the presentation, I may be able to provide you feedback for your presentation. The report you submit should be of professional quality and be in the format of a technical paper/report. The length of the report should be about the length of a journal or conference paper which is typically 8 to 10 printed pages. Two column format is preferred. Briefly stating the report you submit should meet the format (and possibly contents) requirements imposed by IEEE conferences and journals. All reports should be printed in 8.5 × 11 in. format, and contain the following:

- Title
- Authors and their affiliations/addresses
- Abstract (summary of paper).
- Introduction (problem motivation, background materials, related work, summary of objectives and methods).
- Description of surveyed algorithms/schemes; system model, assumptions, and/or formal problem formulation for research-oriented papers.
- Comparison among existing algorithms/schemes surveyed and discussion on possible improvements/enhancements; project results (derivation, proof, justification, or detailed design) in one or more numbered sections for research-oriented papers.
- Conclusions (evaluation of results, suggestions for improvements, or future work).
- References (Please follow IEEE Transactions format).
- Appendices (if appropriate).

6. Evaluation/Review

Each report will be reviewed by at least 3 to 4 reviewers chosen from the students enrolled in this course, and by the instructor. I will provide the review forms and the review criteria. Your reviews will also be evaluated by the instructor. Your reviews will be due on Friday May 9, 2014, by 5:00 PM. The review form will follow a format similar to the format used by many conferences and journals in this area.
7. Topics

Please see the list on the web.

http://www.cae.wisc.edu/~saluja/ECE753/INFO.html

This list also includes projects completed by students in the past offerings of this course. You may choose your project from this list and in some cases, I may have the previous report available with me.