Assignment 0 for 513: Design of fault-tolerant digital systems (2013, Term 2)

This form is due on Jan 16th, 2013 in class. It is not graded. However, failure to submit it will result in one point (out of ten) being taken off from assignment 1.

Name:

Home department:

Program (e.g., M.Eng., MSS. PhD, M.A.Sc.):

Advisor and research area (if known):

On a scale of 1 to 5 (with 1 being the least), which of the following topics most interest you (you can rate a topic 0 if you don't care either way):

- **1.** Logic-level fault tolerance
- **2.** Error correcting codes
- **3.** Architectural fault tolerance
- **4.** Software fault tolerance
- **5.** Robust data structures and algorithms
- **6.** Checkpointing and recovery
- **7.** Agreement protocols and byzantine agreement
- **8.** Case studies of real-world fault-tolerant systems

On a scale of 1 to 5 (with 5 being expert), which of the following topics are you familiar with (you can rate a topic 0 if you've never heard of it before)

- **1.** Conditional probability and Baye's theorem
- **2.** Exponential distributions and Poisson processes
- **3.** Discrete time and continuous time Markov chains
- **4.** Digital logic design and at least one Hardware Description Language (e.g., VHDL, Verilog)
- **5.** Software design and at least one compiled programming language (e.g., C, C++, Java)
- **6.** Scripting and at least one scripting language (e.g., Perl, Python, Tcl, JavaScript)
- **7.** Unix systems/socket programming
- **8.** OS design and linux kernel internals
- **9.** Distributed system basics (e.g., Lamport's logical clocks, message passing)
- **10.** Statistical methods (e.g., correlation and regression, ANOVA, 2-way tests)

Why do you want to take this course? What would you like to see covered?