STT 351 – 1 (Honors)  
Spring, 2014  

Instructor: V. Mandrekar, C436 Wells Hall, 353-7172  
Email: mandrekar@stt.msu.edu  
Class Time & Place: MWF 10:20 – 11:10 a.m.; A301 Wells Hall  
Office Hours: 3:30-4:30 p.m.  

Text: Notes to be provided  

Course Objectives:  
1. Understanding randomness in data.  
2. Regularity in data.  
4. Designing reliable devices. (Independence)  
5. Use of random variables in quality control.  
7. Relationship of 5 and 6 to Testing Hypothesis.  
8. Describing the relationship between process and yield. (Regression Analysis, Design of Experiments)  
9. Use of Statistical process control charts to determine the stability of process.  
10. Engineering decision making in random environment (if time permits).  

The homework will be assigned and occasionally to be handed in. It will be of two types:  
   i) Mathematical (involving the use of calculus)  
   ii) Computational (use of Minitab to analyze data)  

There will be two examinations (Midterm and Final) and three projects (Final project involves a complete report).  

The grades will be based on overall performance as follows:  
   Midterm 100 points  
   Final 150 points  
   Projects 1 & 2 50 points each  
   Final Project 100 points  

The timing of the exam and projects will be announced a week in advance. The performance in homeworks to be handed in will determine the borderline cases. Tentatively, we will use straight scale unless class performance requires some curving.  

Important Dates:  
   January 6 Classes begin; late enrollment fee begins  
   January 10 Close of add period  
   January 20 Martin Luther King Day (No Classes)  
   January 31 Last Day for 100% Refund  
   February 26 Middle of the Semester; last day to drop with no grade  
   March 3-7 Spring Break  
   April 25 Last Day of Classes  
   April 30 Final Exam 10:00 a.m. – 12:00 noon