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Course Grader:  Dewi Rahardja  
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Official Office Hours:  1-3 Tu, Th

Course Requirements:  2 Exams (1 in class around mid term and 1 during finals week)  
Approximately 5 (substantial) Homework Sets

Homework Policy:  You may work together on the homework and even ask Vardeman for help, but  
Every person must independently write up and turn in his or her own version of  
the solutions.

Grading:  For those who turn in all the homework (essentially on time), course grades will be based  
primarily on the two exams (equally weighted). For such people, Vardeman will  
however, reserve the right to raise an exam-based grade by as much as 1/3 of a letter  
grade for exceptionally good homework or drop an exam-based grade by as much as 1/3  
of a grade for clearly substandard homework. For those who fail to turn in a significant  
portion of the homework, Vardeman may subtract as much as a whole letter grade from  
an exam-based grade in determining a course grade.

and Sons)  
Graduate Lectures and Problems in Quality Control and Engineering Statistics, Course Notes by  
Vardeman to Supplement the Text

Current Course Resources:  http://www.public.iastate.edu/~vardeman/stat531/stat531.html

Topics and Tentative Schedule:  • Introduction and a Useful Preliminary from Probability (~.5 week)  
• Statistics and Engineering Measurement (~3 weeks)  
• Process Monitoring-Standard Methods (~2.5 weeks)  
• Process Monitoring-Theory (~3 weeks)  
• Engineering Control and Stochastic Control Theory (~1.5 weeks)  
• Process Characterization and Capability (~1.5 weeks)  
• Sampling Inspection-Methods (~1 week)  
• Sampling Inspection-Theory (~1.5 weeks)

Some Other Books:  Statistical Quality Control: Theory and Practice, Wetherill and Brown,  
Chapman and Hall, 1991  
Basic Engineering Data Collection and Analysis, Vardeman and Jobe, Duxbury-Thomson Learning, 2001  
Statistics for Engineering Problem Solving, Vardeman, PWS Publishers, 1994