

ME 3620 Theory of Engineering Experimentation

Semester: Spring 2012

Objectives: ME 3620 is a unique course designed to aid engineers in performing experimental design by statistical analysis. Analysis of errors and working relationships between variables are discussed.

Class Hour: Mon, Wed: 4:30 – 5:50 p.m., Room D-115, Parkview campus.

Instructor: Dr. Christopher Cho, Professor, P.E.
Dept. of Mechanical and Aeronautical Eng., WMU

Text: “Engineering Statistics,” 5th ed., 2011, written by D. Montgomery and published by John Wiley Co.

Office: Room F-236, Parkview campus, WMU

Office Hrs: Mon, Wed, Thurs: 3:30 –4:20 p.m.

Website: homepages.wmich.edu/~cho

Topics to be covered (Tentative)

1. Ch 3: Random Variables and Probability Distributions (selected topics)
2. Ch 4: Decision Making for a Single Sample.
3. Ch 5: Decision Making for Two Samples.
4. Ch 7: Design of Engineering Experiments.
5. Ch 8: Statistical Process Control.
6. Error Analysis.

GENERAL CLASS POLICY

1. Make-up test will not be provided without acceptable justification. A grade of” zero % “will be given for the missed test.
2. Home works are collected at the beginning of a class, and no late home works will be accepted.

TEST AND GRADING POLICIES :

A: Above 90.0 %	
BA: 85.0 -89.9 %	1 st mid Test : 30%
B: 80.0 - 84.9 %	2 nd mid test : 30%
CB: 75.0 - 79.9 %	Final exam : 30%
C: 70.0 - 74.9 %	Homework: 10%
DC: 65.0 - 69.9 %	
D: 60.0 - 64.9 %	<u>Total : 100%</u>
E: below 60.0 %	

Final Exam: (April 23, 5:00 – 7:00 p.m.), according to the WMU final exam schedule.