MBA/MIB 5315 Statistical Methods for Management
Decisions Section A (Summer 1)

Time:       MW 1730-2050
Location:   MYL 013
Course Text:  Business Statistics, a Decision-Making Approach, 6th ed., David Groebner,

Instructor:
Dr. John A. Dobelman
dobelman@stat.rice.edu (until I get the UST one working)
Office Hours:  Negotiable, by appointment only, 713 348 5369, or mobile 713 502 3894.
Welder Hall 219 cubicle 3, 713 525 3132 x5983#, but not there that often.

Course Website:  http://www.stat.rice.edu/~dobelman/courses/mba5315.html
Also, check the blackboard.

Course Description:
This course is designed to introduce the student to statistical methodology useful for data analysis and managerial decision-making. Emphasis will be placed on applications through working examples and computer-assisted data analysis in lab sessions.

Course Content:  Chapters 1–9 of text plus special topics, Possible other real-life data project(s)

Ch 1,2,13  data, graphs, determinism vs. stochasticity, populations vs. samples, experimental design, sampling, inference, bivariate data; scatterplots, least squares regression and correlation
Ch 3  data reduction, descriptive statistics, "normal" distribution
Ch 4  randomness, probability concepts, random variables (r.v.'s), distribution moments (mean, variance, etc.); discrete models
Ch 5  continuous probability models
Ch 6,7  sampling distributions, counts and proportions, point and interval estimation: confidence, significance, statistical tests
Ch 8  Introduction to hypothesis testing; power and inference, inference for single populations
Ch 9  Hypothesis testing and inference for two populations

Other Topics
Ch __  Introduction to Analysis of variance (ANOVA), two-factor analysis; Linear regression, correlation analysis, causation, and data transformations
Ch __  multivariate (multiple) regression and ANOVA
Ch __  Good-of-fit tests, contingency analysis
Ch __  general categorical data analysis
Ch __  time series analysis and forecasting
Ch __  non-parametric statistics
Ch __  Quality control, statistical process control (SPC)
Ch __  decision analysis - uncertainty vs. risk, utility theory, game theory
Grading: 50% assignments, 50% examination. Late policy: 20% penalty for HW turned in by next class; no credit for later than this.

<table>
<thead>
<tr>
<th>Assignments (50%)</th>
<th>Test/Quiz/Exam (50%)</th>
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<tbody>
<tr>
<td>Homework: 25%</td>
<td>Test 1: 25%</td>
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<tr>
<td>Final Project: 25%</td>
<td>Test 2 (Final): 25%</td>
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Extra Credit: As needed

Other remarks.
If you choose to use a previous version of the textbook, it is your responsibility to use the correct edition for all assignment submissions.

Disabilities:
Any student with a documented disability needing academic adjustments or accommodations is requested to speak with me during the first two weeks of class. All discussions will remain confidential. Students with disabilities may also contact the Director of Human Resources concerning an accommodation.