

BUS 264: Fall WEC 2008
STATISTICAL LITERACY FOR MANAGERS

INSTRUCTOR: Marc Isaacson

OFFICE HOURS: On Campus MWF mornings and by appointment
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TEXTS: *Business Statistics (Preliminary Edition)*, by Sharpe, De Veaux and Velleman. **Note: This book will be provided in-class. There is no required book to purchase from the bookstore.**

Additional Information will be provided in electronic format via Moodle including articles, cases, and supplementary readings.

In the classroom, we will be using Microsoft Excel 2007 along with the software add-in @Risk from Palisade Software. The software provided with the textbook is compatible with older versions of MS Excel.

OBJECTIVES: The student who successfully completes this course should:

1. Understand the presence of variation in business data and be able to achieve business goals by planning, predicting and managing variation.
2. Read and interpret statistics presented as evidence for management decisions
3. Analyze business situations and identify appropriate non-financial performance measurements.
4. Understand the life cycle of survey data by creating a survey and reporting the results in written form
5. Be able to model business situations using Monte Carlo simulation software

PREREQUISITES: MPG3 and MIS 260 or approval of instructor with demonstrated proficiency in Microsoft Excel including formulas, functions, pivot tables, scenario manager and other advanced features.

EVALUATION:	1. Quizzes	15%
	2. Mid-Term Exam	25%
	3. Homework / Case Studies	30%
	4. Course Project	25%
	5. Presentation	5%

Final grades will be determined based on overall percentages, with 94% required for a 4.0, 88% for a 3.5, 82% for a 3.0, 76% for a 2.5, etc.

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POLICIES: Homework: The best way to learn statistics and software is to use it, so you will have a fair amount of homework. Homework will be collected at the beginning of class. **Late homework will not be accepted at full credit unless approved in advance. Late assignments will have points deducted.** You can call and let me know why you are not coming to class the day it is due. Some extra credit opportunities may be provided to make up missed points. Cooperation among students is encouraged as long as each student physically produces his/her own homework (i.e. does all the typing).

Attendance: It is important that students attend class. Some material will be covered in class that is not in your texts. Students who miss more than 6 class hours without an approved excuse may have their overall grades reduced by .5 grade.

Honesty: In accordance with Augsburg's academic honesty policy, students will sign a statement at the beginning of the course to reaffirm student honesty. Any student found cheating on a quiz or exam will automatically receive a 0 on that item and the incident will be reported to school administration.

Makeup Tests and Quizzes: Must be approved in advance by instructor. Leave a message on my voice mail in case of last minute emergency.

Use of Computer Classroom: Students are encouraged to help each other during class to learn the software tools. It is very important that students actively participate in class. Students are not permitted to use the computers for work not being covered in class and will be asked to leave if they are doing so. Please respect others and be sure that your cell phones and other devices are turned off during class time.

SOFTWARE:

Students can purchase microcomputer software at substantial discounts (about 50% off) through the online website www.journeyed.com.

COMPUTER

LAB: You will need an AugNet account with **user id and password** to access the network. If you do not have one, contact the IT department on the second floor of the Lindell Library. Computers are available 24 hours/day in the Urness dorm. You can also use PCs or laptops in the library.

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SIMULATIONS / HOMEWORK / CASE STUDIES

This course will build on student knowledge of Excel from MIS 260 and integrate the use of simulation software (@Risk) to complete business oriented case studies and homework assignments. These activities will provide the students a chance to learn how to model, predict and make business decisions to manage variation. Besides focusing on the technical spreadsheet models, significant emphasis will also be placed on the communication of the analysis in written executive summaries.

PRESENTATIONS

Prepare a **short** (5-10 minute) presentation on one of the following topics. This can be done individually or as a group of two students. Presentations will be given in our final 2 class periods. You will submit a proposal to let me know the intended topic for your presentation so I can advise on reference materials and avoid duplication of topics among students

Potential Topics

Data Mining
ISO 9000
Kaizen
Lean Manufacturing
Six Sigma

SPC / Process Control
TQM
W. Edwards Deming
Yield Management

COURSE PROJECT

This course project will give you a chance to develop a hypothetical data collection survey regarding a topic of interest to you, whether personal or professional. We will use technology to generate your survey data set and get respondent answers to your survey questions. By the end of the project, you will apply the statistical tools we are learning in the course to your personal survey dataset.

By the time you finish this project, you should have gained confidence and knowledge in the process of data collection, analysis, and interpretation. Since we will be using technology to randomly generate answers to your survey questions, you will have to “listen” to the data to generate your conclusions and interpretations.

Deliverables for the project include the following:

- Survey Questions & Sampling Plan
- Descriptive Summary Statistics
- Tabular and Graphical Summaries
- Comparisons between / within variables
- Scatterplots / T-tests / Regression
- Confidence Intervals
- Written report of entire project including Executive Summary and learning reflections