Webster UNIVERSITY	The School of Business & Technology Course Syllabus

Course	BUSN 5760 57 Applied Business Statistics
Term	Fall 1, 2009, Ft. Sam Houston
Instructor	Name: Dr. Aaron DeWispelare Phone: (W) 210.522.6072, (H) 830.981.2357 Email: dewispa@webster.edu
Catalog Description	The student examines the application of statistical analysis, hypothesis testing, and regression analysis in business decision making. The course should focus on the utilization of statistical methods as applied to business problems and operations.
Prerequisites	None
Course Level Learning Outcomes	1. Students can describe basic statistics concepts and apply proper sampling methods. 2. Students can compute basic descriptive statistics. 3. Student can describe a normal distribution and apply the concepts of the normal distribution to that of sampling distributions. 4. Students can construct confidence intervals for both numerical and categorical data, and can apply to a real-world business scenario. 5. Students can use numerical or categorical data to assess the validity of statements made in a business setting. 6. Students can perform simple and multiple regression analysis. 7. Students can determine expected wealth in an uncertain business climate. 8. Students can apply various advanced forecasting techniques.
Materials	Title: *Statistics for Managers Using Microsoft Excel,* 5th edition Authors: Levine, D.M., Stephan, D., Krehbiel, T.C., & Berenson, M.L. Upper Saddle River, NJ: Publisher: Prentice Hall. ISBN: 0132295458
Grading	Your course grade will be based on your scores on your examinations, assignments, and your contributions to class discussions. These different components will be weighted as follows: • Homework Problems 40% • Mid Term Exam 27.5% • Final Exam 27.5% • Class Participation 5%
Activities	Homework: A number of homework problems will be assigned for each week of the course. These assigned questions are to be completed before class for handing in at class in the week assigned. Each question should be

	answered on a separate sheet of paper with the student's name at the top of the sheet of paper. For all problems, state an objective and approach, solve problem, and supply a finding, conclusion, or recommendation as appropriate followed by a reasonability test. No late work will be accepted. These homework questions may be accomplished using statistical analysis software such as Excel. The individual weekly homework problems will be assigned in the first week of the term. Because of the extensive number of handouts, a modest copying charge will be assessed in week one.
University Policies	University policies are provided in the current course catalog and course schedules. They are also available on the university website. This class is governed by the university's published policies. The following policies are of particular interest: **Academic Honesty** The university is committed to high standards of academic honesty. Students will be held responsible for violations of these standards. Please refer to the university's academic honesty policies for a definition of academic dishonesty and potential disciplinary actions associated with it. **Drops and Withdrawals** Please be aware that, should you choose to drop or withdraw from this course, the date on which you notify the university of your decision will determine the amount of tuition refund you receive. Please refer to the university policies on drops and withdrawals (published elsewhere) to find out what the deadlines are for dropping a course with a full refund and for withdrawing from a course with a partial refund. **Special Services** If you have registered as a student with a documented disability and are entitled to classroom or testing accommodations, please inform the instructor at the beginning of the course of the accommodations you will require in this class so that these can be provided. **Disturbances** Since every student is entitled to full participation in class without interruption, disruption of class by inconsiderate behavior is not acceptable. Students are expected to treat the instructor and other students with dignity and respect, especially in cases where a diversity of opinion arises. Students who engage in disruptive behavior are subject to disciplinary action, including removal from the course. **Student Assignments Retained** From time to time, student assignments or projects will be retained by The Department for the purpose of academic assessment. In every case, should the assignment or project be shared outside the academic Department, the

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<tr><td></td><td>student's name and all identifying information about that student will be redacted from the assignment or project.

Contact Hours for this Course
It is essential that all classes meet for the full instructional time as scheduled. A class cannot be shortened in length. If a class session is cancelled for any reason, it must be rescheduled.</td></tr>
<tr><td>Course Policies</td><td>This syllabus may be revised at the discretion of the instructor without the prior notification or consent of the student. The schedule below presents an approximate expectation of course progress. The instructor reserves the right to add, delete, or modify any weeks of this schedule. The instructor also reserves the right to change the overall course grade weighting. Any changes will be announced in class.

If you miss class you are responsible for getting notes and assignments. No late homework will be accepted and missed quizzes will receive scores of zero unless prior approval to miss class is obtained from the instructor. Makeup exams will be scheduled only if arranged in advance of the scheduled exam date.</td></tr>
<tr><td>Weekly Schedule</td><td>
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<tr><th>Week</th><th>Topics</th><th>Chapters in Text</th></tr>
<tr><td>1</td><td>INTRODUCTION, DESCRIPTIVE STATISTICS, and PROBABILITY:

Basic Terminology, Descriptive Statistics, Charts and Graphs, Basic Probability</td><td>1 - 4</td></tr>
<tr><td>2</td><td>PROBABILITY DISTRIBUTIONS NORMAL PROBABILITY, SAMPLING DISTRIBUTIONS, CONFIDENCE INTERVAL ESTIMATION:

Expected Value, Probability Distributions, Normal Probability, Central Limit Theorem, Confidence Intervals, Sample Size, Sampling</td><td>5 - 8</td></tr>
<tr><td>3</td><td>HYPOTHESIS TESTING FOR ONE and TWO SAMPLES:

One Sample Hypothesis Testing and Two Sample Hypothesis Testing</td><td>9 - 10</td></tr>
<tr><td>4</td><td>HYPOTHESIS TESTING FOR MORE THAN TWO SAMPLES:

Analysis of Variance</td><td>11</td></tr>
<tr><td>5</td><td>MIDTERM EXAM (Chapters 1 – 8)</td><td></td></tr>
<tr><td>6</td><td>CHI-SQUARE and other NONPARAMETRIC TESTS (SAMPLES of CATAGORIZED DATA):

Chi Square Test of Independence, Goodness of Fit Test</td><td>12</td></tr>
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	7	HYPOTHESIS TESTS OF RELATIONSHIPS: Correlation, Simple Linear Regression, Multiple Linear Regression	13 - 14
	8	MULTIVARIATE MODELING: Time Series Analysis with Smoothing and Seasonality	16
	9	FINAL EXAM (Chapters 9 – 14, 16) Course Summation	