

Course	BUSN 2750 Introduction to Statistics	
Term	Fall 1, 2009	
Instructor	Rob Curry 816.941.0430 x-5266 rcurry@webster.edu OR rcurry@kc.devry.edu	
Catalog Description	Studies the logic of empirical research and statistical tools.	
Prerequisites	MATH 1430, or equivalent	
Course Level Learning Outcomes	Outcome	Expectation
	1. Students understand the basics of data collection and random sampling.	Students learn/review basic statistics concepts. Students will also learn about proper sampling methods, as well as common errors that occur during the sampling process.
	2. Students understand how to create, use and interpret tables and charts.	Students will learn how to interpret data from tables and charts. Students should also be shown how to use Excel to create tables and charts for presentational purposes. Students should also be shown how tables and charts can be useful when assessing probabilities.
	3. Students understand basic calculations of descriptive statistics.	Students learn basic descriptive statistics such as the mean, median, mode, variance, standard deviation, coefficient of variation, skewness, and coefficient of correlation.
	4. Students understand the basics of probability.	Students will learn the difference between subjective, empirical, and a priori probability. Students will also learn a variety of probability rules.
	5. Students understand the concept of random variables, as well as probability distributions for discrete random variables.	Students will learn how to calculate descriptive statistics for a discrete random variable. Students will also learn what a probability distribution is, as well as be introduced to other selected discrete random variables.
	6. Students understand the basic properties of the normal distribution and sampling	Student will become familiar with the properties of a normal distribution, how to use Z tables, and how to apply the concepts of the normal distribution to that of sampling distributions.

	distributions in general.										
	7. Students construct confidence intervals and calculate sample size selection.	Students learn how to construct confidence intervals and learn how to determine the appropriate sample size for a particular study.									
	8. Students learn the methods of hypothesis testing.	Students learn how to use the scientific method of hypothesis testing, and students will also be exposed to both one and two tailed tests.									
	9. Students learn how to conduct regression analysis.	Students learn simple and multiple regression analysis, and then learn how to use regression results in a real-world setting.									
Materials	<p><u>First Course in Statistics</u>, by McClave. 9th edition, ISBN 0131499793</p> <p>Text is available through MBS Direct Books at 1-800-325-3252 or www.mbsdirect.net. Checks and credit cards accepted.</p>										
Grading	<table border="1"> <tr> <td></td> <td style="text-align: center;">%</td> </tr> <tr> <td>Midterm exam</td> <td style="text-align: center;">40%</td> </tr> <tr> <td>Final exam (comprehensive)</td> <td style="text-align: center;">50%</td> </tr> <tr> <td>In class submittals</td> <td style="text-align: center;">10%</td> </tr> </table> <p>The UNDERGRADUATE catalog provides these guidelines and grading options:</p> <ul style="list-style-type: none"> • A, A- superior work in the opinion of the instructor • B+, B, B- good work in the opinion of the instructor • C+, C, C- satisfactory work in the opinion of the instructor • D+, D passing, but less than satisfactory work in the opinion of the instructor • I incomplete work in the opinion of the instructor • ZF An incomplete which was not completed within one year of the end of the course • F unsatisfactory work in the opinion of the instructor; no credit is granted • W withdrawn from the course • IP course in progress • NR not reported for the course • Z a temporary designation given by the registrar indicating that the final grade has not been submitted by the instructor. When the final grade is filed in the Office of the Registrar, that grade will replace the Z. 				%	Midterm exam	40%	Final exam (comprehensive)	50%	In class submittals	10%
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Activities	Homework assignments from back of each chapter										
Policy Statements:	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										

<p>University Policies</p>	<p>particular interest:</p> <p><i>Academic Honesty</i></p> <p>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.</p> <p><i>Drops and Withdrawals</i></p> <p>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.</p> <p><i>Special Services</i></p> <p>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.</p> <p><i>Disturbances</i></p> <p>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.</p> <p><i>Student Assignments Retained</i></p> <p>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 student's name and all identifying information about that student will be redacted from the assignment or project.</p> <p><i>Contact Hours for this Course</i></p> <p>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</p>
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	cancelled for any reason, it must be rescheduled.		
Course Policies	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.		
Weekly Schedule	Week I	Introduction, Review of Math Statistics, Data, and Statistical Thinking Methods for Describing Sets of Data	Chapter 1 Sections 2.1, 2.2
	Week II	Methods for Describing Sets of Data Probability	Sections 2.3-2.9 Chapter 3
	Week III	Random Variables and Prob. Dist. Review for Quiz 1	Chapter 4 Chapters 1-4
	Week IV	Inferences Based on a Single Sample Quiz 1	Chapter 5 Chapters 1-4
	Week V	Tests of Hypothesis	Chapter 6
	Week VI	Comparing Population Means Comparing Population Proportions	Chapter 7 Chapter 8
	Week VII	Simple Linear Regression Review for Quiz 2	Chapter 9
	Week VIII	Quiz 2 (comprehensive) Projects Due	Chapters 1-9
Additional Information	We will discuss the project submittals on the first night of class. I will distribute samples (with answers) for the two exams		

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