

DSCI 3231-02
Spring 2013
Tuesday-Thursday 10:00-11:20 A.M.
UHCL - Bayou Bldg. - 2512

Instructor: Ken Black, Ph.D., Ph.D.

Office: Bayou Building 3321-17; 281-283-3239
email: black@uhcl.edu

Office Hours: Tuesday 1:30-3:30 P.M.
Wednesday 1:00-2:30 P.M. and 4:00-4:30 P.M.
Thursday 1:30-3:30 P.M.

Required Materials:

Text Black, Ken
***Business Statistics For Contemporary
Decision Making***, 7th Edition,
Custom UHCL version.
Wiley Publishing Company, 2012.
You must have a text with WileyPLUS.

WileyPLUS If you purchase a text that is not shrink-wrapped with WileyPLUS, you will be required to purchase WileyPLUS separately.

eText WileyPLUS contains an electronic version of the text. You need not necessarily purchase a "hard copy" of the text.

Calculator: You need to have a calculator with capability of performing 2-variable statistical analysis.

Class URL for WileyPLUS:

<http://edugen.wileyplus.com/edugen/class/cls314221/>

Prerequisite: You should have taken both College Algebra and Finite Math before taking this course.

Learning Outcomes:

Upon completion of this course, students will be able to:

1. To categorized data by level of measurement.
2. To understand and apply the empirical rule.
3. To calculate p -values.
4. To make decisions about whether or not to reject a null hypothesis based on a critical value and/or a p -value.
5. To understand the concepts of Type I and Type II errors.

Attendance Policy:

Class attendance is considered to be **very important** by the instructor. Excessive absences will result in the lowering of your final grade or in administrative removal from course.

Academic Honesty Policy:

Academic honesty is the cornerstone of the academic integrity of the university. It is the foundation upon which the student builds personal integrity and establishes a standard of personal behavior. Because honesty and integrity are such important factors in the professional community, you should be aware that failure to perform within the bounds of these ethical standards is sufficient grounds to receive a grade of "F" in this course and be recommended for suspension from UHCL.

As a member of the UHCL faculty and representing the university in this capacity, I will be honest in all my academic activities and will not tolerate dishonesty.

Course Format:

The course will rely on lecture, presentation, discussion, videos, and other WileyPLUS resources. In most class periods, some time will be dedicated to going over assigned problems. Students will be expected to read and study text materials to expedite the coverage of material. There will be some expectation of computer usage for the class. Students will be required to work additional problems and take addition quizzes on-line through WileyPLUS.

Method of Evaluation:

Grade Determination

Examination I	* * * * *	25%
Examination II	* * * * *	25%
Final Examination	* * * * *	25%
Computer Assignments	* * * * *	9%
WileyPLUS Quizzes and Assignments	*	14%
Attendance	* * * * *	2%
Total	* * * * *	100%

Students with Disabilities:

If you will require special academic accommodations under the Americans with Disability Act, Section 504, or other state or federal law, please contact the Disability Services Office at (281) 283-2626.

Assessment for Accreditation:

The School of Business may use assessment tools in this course and other courses for curriculum evaluation. Educational Assessment is defined as the systematic collection, interpretation, and use of information about student characteristics, educational environments, learning outcomes and client satisfaction to improve program effectiveness, student performance and professional success. This assessment will be related to the learning objectives for each course and individual student performance will be disaggregated relative to these objectives. This disaggregated analysis will not impact student grades, but will provide faculty with detailed information that will be used to improve courses, curriculum, and students' performance.

6 Drop Rule Limitation - Students who entered college for the first time in Fall 2007 or later should be aware of the course drop limitation imposed by the Texas Legislature. Dropping this or any other course between the first day of class and the census date for the semester/session does not affect your 6 drop rule count. Dropping a course between the census date and the last day to drop a class for the semester/session will count as one of your 6 permitted drops. You should take this into consideration before dropping this or any other course. Visit www.uhcl.edu/records for more information on the 6 drop rule and the census date information for the semester/session.

Black - DSCI 3231 Syllabus - Page 4

<u>Date</u>	<u>Day</u>	<u>Topic</u>
Jan. 15	Tues.	Course Introduction. Develop class database. Chapter 1. Introduction to Statistics. Levels of Data. Read: pp. 2-11
Jan. 17	Thurs.	Chapter 2. Descriptive Charts & Graphs, Read: pp. 18-39
Jan. 22	Tues.	Chapter 3. Descriptive Statistics - Ungrouped Data. Read: pp. 52-56, 61-66. Using your calculator.
Jan. 24	Thurs.	Chapter 3. Empirical Rule, z scores, meaning of standard deviation, coefficient of variation. Read: pp. 66-74.
Jan. 29	Tues.	Chapter 3. Descriptive Statistics - Measures of Shape: Skewness and Kurtosis. Read: pp. 83-84. Chapter 4. Introduction to Probability. Read: pp. 98-108.
Jan. 31	Thurs.	Chapter 4. Addition Law and Multiplication Law. Read: pp. 109-120.
Feb. 5	Tues.	Chapter 4. Conditional Law. Read: pp. 120-125. Bayes' Theorem. Read: pp. 122-132.
Feb. 7	Thurs.	Chapter 4. Solving Probability Problems. *****Computer Assignment 1 Due *****
Feb. 12	Tues.	Chapter 5. Discrete Distributions - Discrete vs. Continuous Distributions. Read: pp. 142-145. The Binomial Distribution Read: pp. 149-158.
Feb. 14	Thurs.	<u>EXAMINATION 1 - Chapters 1-4</u>
Feb. 19	Tues.	Chapter 5. Binomial Distribution (cont.).

Feb. 21 Thurs.

Chapter 5. Poisson Distribution.

Read: pp. 160-166.

<u>Date</u>	<u>Day</u>	<u>Topic</u>
Feb. 26	Tues.	Chapter 6. Continuous Distributions - Introduction to Normal Curve. Read: pp. 190-199.
Feb. 28	Thurs.	Chapter 6. Continuous Distributions - Working Normal Curve Problems - forwards Read: pp. 190-199.
Mar. 5	Tues.	Chapter 6. Continuous Distributions - Working Normal Curve Problems - backwards. Read: pp. 190-199.
Mar. 7	Thurs.	Chapter 12. Correlation and Simple Regression Analysis. Developing the equation of the regression line. Read: 475-481. *****Computer Assignment 2 Due *****
Mar. 12	Tues	Spring Break
Mar. 14	Thurs	Spring Break
Mar. 19	Tues.	Chapter 12. Correlation and Simple Regression Analysis. Residual analysis. Read: 483-487. Standard error of the estimate. Read: 490-492. Coefficient of determination. Read: 493-495.
Mar. 21	Thurs.	Chapter 12. Bivariate correlation. Read: pp. 472-474. Determining linear trend in time series data. Read: pp. 504-509.
Mar. 26	Tues.	Chapter 7. Central Limit Theorem. Sampling Distribution of \bar{x} Read: pp. 234-241.
Mar. 28	Thurs.	<u>EXAMINATION 2 - Chapters 5, 6, and 12</u>
Apr. 2	Tues.	Chapter 8. Confidence Intervals and Estimation. C.I. to estimate the Mean using z. Read: pp. 257-263
Apr. 4	Thurs.	Chapter 8 (cont.)

C.I. to estimate the population proportion.
Read: pp. 273-275

<u>Date</u>	<u>Day</u>	<u>Topic</u>
Apr. 8	(Mon.):	Last Day to Drop a Class Without Receiving a Grade
Apr. 9	Tues.	Chapter 8 (cont.) C.I. to estimate the mean using t . Read: pp. 266-271.
Apr. 11	Thurs.	Chapter 9. Hypothesis Testing - Single Sample. Introduction to Hypothesis Testing. Read: pp. 295-305.
Apr. 16	Tues.	Chapter 9 (cont.) Testing Hypotheses about a mean using the z statistic. Read: pp. 305-312 Testing Hypotheses about a proportion. Read: pp. 321-325. Testing Hypotheses about a mean using the t statistic. Read: pp. 314-318.
Apr. 18	Thurs.	Chapter 10. Testing Hypotheses about Two Populations. z test of the difference in means of two independent groups. Read: pp. 349-356.
Apr. 23	Tues.	Chapter 10 (cont.) t test of the difference in means of two independent groups. Read: 361-365. z test of the difference in proportions of two populations. Read: 381-383.
Apr. 25	Thurs.	Chapter 7. Sampling. Read: pp. 223-233. Chapter 18. Statistical Quality Control. Read: pp. 735-752. *****Computer Assignment 3 Due *****
Apr. 30	Tues.	FINAL EXAMINATION - 10:00 A.M.-12:50 P.M.