ECO 220-1   STATISTICS FOR BUSINESS AND ECONOMICS   Fall 2007
Instructor: Don Liteplo

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Course Term
Dates: September 6th to December 11th, 2007
Class Times: Wed & Fri 4:00 - 5:15 pm
Class Location: Room 517

Course Description

This course provides business students majoring in economics, finance, marketing, accounting, management, and other fields of business administration, with an introductory survey of many business applications of descriptive and inferential statistics. Statistics, as studied in this course, are a means of converting data into useful information that can be used to assist the business decision maker in making more thoughtful, information-based decisions. Main topics include: the different levels of data, techniques for summarizing and depicting data, techniques to describe data, principles of probability, probability distributions, sampling distributions, constructing confidence intervals, hypothesis testing, analysis of variance, and simple regression analysis.

Course Objectives

The main purpose of the course is to provide students with an understanding of common types of statistical analysis and with skill in the interpretation of the information that is produced by these types of statistical analysis. Eleven chapters in the required text have been selected for study. These chapters cover the main topics listed above.

Required Text

Ken Black, *Business Statistics for Contemporary Decision Making*, 5th Edition, John Wiley & Sons, Inc.

Other Materials

A portion of the course may involve computer use. The textbook includes student access to a website (http://www.wiley.com/college/WileyPLUS).(http://www.wiley.com/college/miles). The site provides student resources such as demo problems (step-by-step solved problems for each chapter) and a student study guide which contains complete answers to all odd-numbered questions at the end of each chapter in the text. Another available website is http://www.wiley.com/college/black. This latter site contains data bases in Excel format (from all text problems and all cases).   As discussion of topics

proceeds, the instructor will demonstrate the use of Excel's statistical routines to solve some types of statistical problems. One, or more, of the course assignments may include problems which require the student to use Excel's statistical routines. Students can use their own personal computers or computers at Ambrose University College.

Additionally, while a hand-held electronic calculator *with financial and statistical functions* is not required, students may find that using such a tool will considerably reduce time spent in calculations. This is especially helpful when handling assignments and writing quizzes and examinations. While a particular calculator (make and model) cannot be specified, it is recommended that any such calculator purchased should have financial and statistical capabilities similar to the TI BA II Plus. Students may wish to obtain information from the instructor during the first week of classes before deciding whether or not to acquire a hand-held electronic calculator *with financial and statistical functions*. Note that the course instructor will endeavour to assist students with calculator applications, and can provide considerable assistance with the above-named calculator but, because of the wide variety of calculators in use, each student is ultimately responsible for knowing how to use the calculator that he/she brings to the course.

Course Schedule

A *Detailed Course Schedule* will be handed out in the first week of the semester. This schedule will set out the topics, dates, and times for the lectures, and will also show the dates and times for assignments, quizzes, and mid-term examination. The dates and times are subject to change at the instructor's discretion as the course progresses; changes, if any, will be few and will be communicated in advance.

Broad Course Schedule

TOPIC	TEXT REFERENCE
Introduction to Statistics	Chapter 1
Charts and Graphs	Chapter 2
Descriptive Statistics	Chapter 3
Probability	Chapter 4
Discrete Distributions	Chapter 5
Continuous Distributions	Chapter 6
Mid-Term Examination	
Sampling and Sampling Distributions	Chapter 7
Statistical Inference: Confidence Intervals	Chapter 8
Statistical Inference: Hypothesis Testing	Chapter 9

Analysis of Variance   Chapter 11

Simple Regression Analysis   Chapter 14

Final Examination

Course Requirements and Grading

Student performance will be evaluated in a combination of classroom participation and graded assignments, quizzes, mid-term examination, and final examination. Mark allocation is as follows:

Participation	10%
Two Assignments	12% (6% each)
Three Quizzes	21% (7% each)
Mid-Term Exam	22%
Final Exam	35%
	100%

Students need not receive a passing grade on all components of term work and examinations in order to pass the course. However, failure to submit an assignment or write a quiz/examination, without the prior approval of the instructor, may result in an F grade for the course.

Marks for classroom participation are based on the instructor's impression (cumulative through the semester) of the student's efforts to review and comprehend assigned text readings, the student's classroom attitude, quality of responses to questions asked by the instructor, and quantity/quality of contributions to classroom discussion. Absences from class can negatively impact marks for *participation*.

Students are required to read the relevant chapters in the textbook in order to be prepared for the classroom lectures, discussion and problem-solving.

Assignments/Quizzes

The assignments will be take-home exercises. One of the quizzes may be a take-home exercise. Deadlines for completion and submission of these will be clearly indicated in advance.

Take-home assignments/quizzes submitted after the due date will be penalized by 50%, but if submitted after answer keys have been posted, or after any graded materials have been returned to any students, a grade of 0% will be awarded.

All assignment and quiz papers must include the student's name and student ID number.

Note that in order for a student to be eligible to write the final examination, he/she <u>must</u> submit all take-home papers by the last day of lectures <u>and</u> must have written all in-class quizzes on the scheduled dates. The mark for an in-class quiz which is *missed with a legitimate reason* (typically illness, evidenced by a Doctor's note) will normally be spread across (transferred to) the other quiz and assignments.

Mid-Term Examination

The mid-term examination will be 1 1/4 hours (75 minutes) in length. It will be written during regular class time *per the Detailed Course Schedule* and can cover all materials included in the course up to the date of the exam.

A grade of 0% will be awarded for a mid-term examination missed *without a legitimate reason*. If the mid-term examination is missed *with a legitimate reason*, a make-up mid-term examination will be arranged within one week. If the instructor determines that this arrangement is not practical, the final grade will be reallocated as follows:

Participation	10%
Two Assignments	16% (8% each)
Three Quizzes	30% (10% each)
Final Exam	<u>44%</u>
	100%

Final Examination

The final examination will be comprehensive (i.e., can cover any materials included in the course during the semester, but emphasis will be on the material covered in the last half of the course). The final examination will be three hours (180 minutes) in length. The exact time and date for writing will be posted by the Registrar. The final examination will be written during the final examination period – December 13th to 19th, 2007 – following the last day of classes. It is the student's responsibility to ensure that he/she does not have any conflicting commitments during the final examination period.

Graded final examinations will be available for supervised review at the request of the student.

Students need not receive a passing grade on all components of term work and examinations in order to pass the course.

Available Letters for Course Grades

<u>% Grade</u>	<u>Letter Grade</u>	<u>Description</u>
95% to 100%	A+	
90% to 94%	A	Excellent
85% to 89%	A-	
80% to 84%	B+	
76% to 79%	B	Good
72% to 75%	B-	
68% to 71%	C+	
64% to 67%	C	Satisfactory
60% to 63%	C-	
55% to 59%	D+	
50% to 54%	D	Minimal Pass
0% to 49%	F	Failure

Important Notes

A student's final course grade is not based upon the student's attendance record; however, the general expectation is that students will attend all classes in which they are registered. A combination of low academic performance and notable absences from class may be brought to the attention of program administrators.

September 14th is the last day to enter a course without permission and to withdraw from a course and receive tuition refund.

November 16th is the last day to voluntarily withdraw from a course or change to audit without academic penalty.

Course withdrawal forms are available from the Registrar. Students who do not follow the proper withdrawal procedures will be recorded as having failed the course.

It is the responsibility of all students to become familiar with and adhere to the academic policies contained in the Student Handbook and Academic Calendar.

Students are reminded that examinations will be actively invigilated. Students may only bring to an examination room items stipulated by the instructor to be required for the completion of the examination. All non-essential items (including, but not limited to, hats, coats, gloves, knapsacks, purses, and electronic devices other than approved calculators) must be left in an area of the examination room designated by the instructor. All cell phones and other unauthorized electrical devices MUST be turned off during examinations. Failure to comply may result in a failing grade for the examination.

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