

University of North Texas at Dallas
Spring 2012
SYLLABUS

DSCI 3710D-090: Business Statistical Analysis using Spreadsheets		3 Hrs
Department of	Business	Division of Urban and Professional Studies
Instructor Name:	<i>Daniel D. Friesen</i>	
Office Location:	<i>Founders Hall 236</i>	
Office Phone:	<i>972.338.1805</i>	
Email Address:	<i>dfriesen@unt.edu</i>	
Office Hours:	TR noon - 2 pm; W 10 am – 4 pm; T 4-6 pm	
Virtual Office Hours:	<i>Not applicable</i>	
Classroom Location:	<i>Building 1 Room 348</i>	
Class Meeting Days & Times:	TR 2:30 pm - 3:50 pm	
Course Catalog Description:	Statistical inference for means and proportions, analysis of variance, correlation, simple and multiple regression. Extensive use of cases and spreadsheets.	
Prerequisites:	None	
Co-requisites:	None	
Required Text:	1. <u>Business Statistics, (Courseware Edition)</u> , Kvanli / Pavur / Keeling 2. <u>Adventures in Statistics</u> , by James S. Hawkes of Hawkes Learning.	
Recommended Text and References:	Any Excel primer	
Access to Learning Resources:	UNT Dallas Library: phone: (972) 780-3625; web: http://www.unt.edu/unt-dallas/library.htm UNT Dallas Bookstore: phone: (972) 780-3652; e-mail: 1012mgr@fhq.follett.com	
Course Goals or Overview:	The goal of this course is to learn how to use common business statistical techniques to aid in decision making.	
Learning Objectives/Outcomes:	At the end of this course, the student will	
1	have an increased appreciation for the use of statistics in business decision making,	
2	acquire a positive attitude toward business statistics and how it is relevant for your future coursework,	
3	be better able to communicate in the language of applied business statistics,	
4	be better able to select the appropriate statistical tool/methodology to aid in business decision making for your future course work and future job,	
5	be able to use appropriate statistical formulae to solve problems,	
6	be more capable of using a computer to describe and analyze numerical data,	
7	Have an enhanced ability to use quantitative methods for business decision making.	

Course Outline

This schedule is subject to change by the instructor. Any changes to this schedule will be communicated by email, Hawkes, and in-class discussion.

TOPICS	TIMELINE
Course and Instructor Policies Review of necessary concepts from DSCI 2710 Hypothesis testing for a population mean	Week 1
One-tailed test for μ with large n Use of p-values	Week 2
Hypothesis tests for population mean - small n, introduction to t-tables C.I. & hypothesis test for two populations means - large independent samples.	Week 3
C.I. & hypothesis test for two populations means - small independent samples. Paired (dependent) small samples from two populations.	Week 4
F-test for two variances One-way analysis of variance. CASE 1: Comparing population Means - Excel Quiz 1 (Finance)	Week 5
C.I. for population proportion: large samples only. Determination of sample size CASE 2: One-way ANOVA Excel Quiz 2 (Marketing / Management) Hypothesis test for population proportion.	Week 6
Comparing two population props. - large Catch up and Review Quiz 1 on HLS modules 9.3, 9.4, 9.5, 9.6, 10.2, 10.3, 10.4, and 12.1 for 50 points	Week 7
Catch up and Review ***** EXAM 1 *****	Week 8
Chi-Square test for independence/homogeneity Chi-Square test: p-values using chi-square tables	Week 9
Bi-variate data & correlation Covariance & Least Squares Line Meaning of s^2 CASE 3: Chi-Square test - Excel Quiz 3 (Marketing)	Week 10
Simple linear regression: hypothesis test and C.I. for slope Coefficient of determination, danger of assuming causality. Estimation/Prediction Residual analysis	Week 11
Multiple regression: Global F- test vs individual t-tests Multicollinearity	Week 12
Dummy variables. Multiple regression using Excel Step-wise Procedures, further residual analysis, Multiple Regression Cases and Examples CASE 4: Multiple Regression - Excel Quiz 4 (Real-Estate)	Week 13
Multiple Regression Cases and Examples Catch-up and review Quiz 2 on HLS modules 9.2, 9.10, 10.1, 11.1, 11.2, 11.3, 11.4 and 11.5 for 50 points	Week 14
Catch-up and review	Week 15
Finals Week: Comprehensive Final Exam	Week 16

Course Evaluation Methods

This course will utilize the following instruments to determine student grades and proficiency of the learning outcomes for the course.

Exams - There is 1 in-class mid-term exam worth 200 points and 1 comprehensive final worth 200 points. If a student misses the first in-class exam (with an appropriate University approved excuse, as mentioned above) the final may be used to substitute for the missed exam. For each exam you will be allowed to use formula sheets, notes, textbooks, any calculator, and Tables.

Excel Cases: Projects involving the use of **Excel** to analyze business data are assigned. These are an important part of the course grade that is graded via an online **Quiz** that is available in the HLS software using WEBTEST on the dates they are due. **Late Excel Cases are typically not accepted.**

HLS Tutorial Exercises (module certifications): Tutorial exercises using the **Hawkes Learning Systems (HLS): Business Statistics** are assigned. The due dates for the tutorials using **HLS** software are assigned in the detailed syllabus. These form a significant part of the course grade and **must be registered onto the HLS Web database by the due date** to receive full credit.

Grading Matrix:

Instrument	Value (points or percentages)	Total
Mid-term Exam	200 points	200
HLS Tutorials	16 at 10 points each	160
Excel Quizzes	4 at 10 points each	40
Final Exam	200 points	200
Total:		600

Grade Determination

Letter Grades: 540+ = A 480+ = B
420+ = C 360+ = D

University Policies and Procedures

Students with Disabilities (ADA Compliance):

The University of North Texas Dallas faculty is committed to complying with the Americans with Disabilities Act (ADA). Students' with documented disabilities are responsible for informing faculty of their needs for reasonable accommodations and providing written authorized documentation. Grades assigned before an accommodation is provided will not be changed as accommodations are not retroactive. For more information, you may visit the Student Life Office, Suite 200, Building 2 or call Laura Smith at 972-780-3632.

Student Evaluation of Teaching Effectiveness Policy:

The Student Evaluation of Teaching Effectiveness (SETE) is a requirement for all organized classes at UNT. This short survey will be made available to you at the end of the semester, providing you with a chance to comment on how this class is taught. I am very interested in the feedback I get from students, as I work to continually improve my teaching. I consider the SETE to be an important part of your participation in this class.

Assignment Policy:

While only the HLS tutorials (modules) and Quizzes on Excel cases are graded, you are expected to read and understand the relevant sections of the textbook. All reading material is testable, even if it is not emphasized in the lecture.

Exam Policy:

The instructor may allow a make-up exam, or the final exam could be counted twice instead of giving a make-up exam. The course grade of "I" is not given except for rare and very unusual emergencies, as per university guidelines.

Academic Integrity:

Academic integrity is a hallmark of higher education. You are expected to abide by the University's code of Academic Integrity policy. Any person suspected of academic dishonesty (i.e., cheating or plagiarism) will be handled in accordance with the University's policies and procedures. Refer to the Student Code of Academic Integrity at http://www.unt.edu/unt-dallas/policies/Chapter%2007%20Student%20Affairs,%20Education,%20and%20Funding/7.002%20Code%20of%20Academic_Integrity.pdf for complete provisions of this code.

In addition, all academic work submitted for this class, including exams, papers, and written assignments should include the following statement:

On my honor, I have not given, nor received, nor witnessed any unauthorized assistance that violates the UNTD Academic Integrity Policy.

Bad Weather Policy:

On those days that present severe weather and driving conditions, a decision may be made to close the campus. In case of inclement weather, call UNT Dallas Campuses main voicemail number (972) 780-3600 or search postings on the campus website www.unt.edu/dallas. Students are encouraged to update their Eagle Alert contact information, so they will receive this information automatically.

Attendance and Participation Policy:

Attendance is not counted in the grading policy; neither is participation. Student success is directly related to attendance and participation. Students are responsible to notify the instructor if they are missing class and for what reason. Students are also responsible to make up any work covered in class. It is recommended that each student coordinate with a student colleague to obtain a copy of the class notes, if they are absent.

Diversity/Tolerance Policy:

Students are encouraged to contribute their perspectives and insights to class discussions. However, offensive & inappropriate language (swearing) and remarks offensive to others of particular nationalities, ethnic groups, sexual preferences, religious groups, genders, or other ascribed statuses will not be tolerated. Disruptions which violate the Code of Student Conduct will be referred to the Office of Student Life as the instructor deems appropriate.

Policies:

- Use of electronic devices that create distractions to the students or instructor is not tolerated.
- Use of Laptops is permitted and encouraged if you find them helpful. They will not be available for testing.
- See the Student Handbook for a comprehensive discussion of Incompletes. The grade of Incomplete, "I", is seldom given and cannot be used to compensate for poor performance in this course.