DSCI 3710-001, -002 Syllabus: Fall 2016

CLASS (DAY/TIME):   001 <u>Wednesday</u> 7:00 – 9:50 pm in Room 240, Founders Hall (Dal #2)
                                   002 <u>Monday</u>   4:00 – 6:50 pm in Room 240, Founders Hall (Dal #2)
INSTRUCTOR: Daniel D. Friesen, Ph.D.
OFFICE: Founders Hall 236   **PHONE:** 972.338.1805
E-MAIL: Daniel.friesen@untdallas.edu
OFFICE HRS: Mondays 12 noon–4 pm; Tuesdays 2 pm—6 pm; Wednesdays 1 pm–6 pm; And by appt.

1. **Textbook**
   Discovering Business Statistics, Nottingham and Hawkes
      2013 ISBN 978-1-935782-87-2

2. *Hawkes Learning Systems: Business Statistics*, by James S. Hawkes, *Hawkes Learning Systems* (HLS)*,* latest version. Note: This software is **required** to complete the assignments that a significant portion of your grade. **If you have already purchased an earlier version of it for DSCI 2710 or DSCI 3710, it is likely that you can use the same access code. In such case, you do _not_ need to purchase new HLS software**.

3. Optional Books:
   <u>Any Excel Primer</u> – Your Excel reference in BCIS 2610 is fine.

GOALS: At the end of the course, students will
1. attain an increased appreciation for the use of statistics in business decision making and understand how it is relevant for your future coursework and profession,
2. be better able to communicate in the language of applied business statistics,
3. be better able to select the appropriate statistical tool / methodology to aid in business decision making for your future course work and future profession,
4. be able to use appropriate statistical formulae to solve problems,
5. be more capable of using a computer to describe and analyze numerical data,
6. enhance your ability to use quantitative methods for business decision making.

TEACHING METHOD:
1. To better assist students in understanding the use of these methodologies in business, many of the class problems will be presented as simple business cases.
2. Students will observe and actively participate in the working of problems found in the textbook. In addition, students will be required to complete modules in **Hawkes Learning Systems (HLS): Business Statistics**. This process is intended to help students make more efficient use of their time in learning how to solve problems.
3. Students are required to participate in class discussions on statistical methodologies applied to non-trivial cases in various areas of business. The use of spreadsheets in analyzing business data will be stressed.
4. Students are required to complete certification assignments and Excel projects using the Hawkes Learning System software.

EVALUATION:
To demonstrate their ability to use quantitative techniques in business, students will complete the certification tutorials (**Hawkes Learning Systems: Business Statistics**), analyze real business data for class cases using Excel and answer exam questions based on short data analysis situations. Wherever possible, rather than being purely numerical, problems will be presented in written form. The exams and assigned work reinforce the course objectives by simulating real business problems that require students to communicate.

GENERAL COMMENTS
1. Doing the assignments is essential for success in this course. In fact, the assignments constitute a large portion of your grade in this course. I encourage you to keep up with the homework and meet the submission deadlines.

2. This is a challenging class due to the wide range of topics covered. Please allocate time appropriate to your goals for this course. Students should not hesitate to ask questions in class. Usually someone else has the same question, so, by asking in class everyone can benefit from the question.

3. Regular and punctual attendance for each class is expected. Absences and tardiness are likely to cause you to miss the presentation of significant material and this may result in a lower grade. The mid-term exam or the quizzes may be missed only if you have a University-approved excuse. Whenever applicable, such an excuse is to be provided to the instructor in writing, as early as possible.

4. In case they wish to withdraw from/ drop the course, students have the final responsibility for seeing that they properly withdraw before the scheduled last drop day. A student who stops attending class should execute the drop procedure since failure to do so will result in a grade of "F" which cannot be changed.

5. Students are requested not to phone ANYONE to obtain their final grade in the course. Final grades are only available electronically.

DSCI 3710 COURSE- SPECIFIC POLICIES:
1. **Syllabus Calendar:** The syllabus is a tentative outline for the semester. Items are subject to change. Certain topics may be stressed more or less than indicated. Exam dates are generally NOT changed.

2. **Homework:** Homework is assigned and should be completed by recommended dates. While only the HLS tutorials (certifying 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.

3. **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.

4. **HLS Tutorial Exercises (module certifications):** Tutorial exercises using the **Hawkes Learning Systems (HLS): Business Statistics** are assigned. These form a significant part of the course grade. On completion of a module in a school lab, or at home, you should **save the HLS certification code to your disk**. If you are connected to the internet, the module will register automatically but check that you have received credit by examining your progress report. If there is any problem, exit HLS and then go to your course HLS Web site at http://www.hawkeslearning.com/UNTDDBS/.

No credit is awarded for any tutorial exercise completed after 12/13/2016.

To get your authorization code for using the HLS software, if you are a new purchaser of the software, you will need to visit HLS web site at http://www.hawkeslearning.com/webcodeform/makacode.asp . If you previously purchased the software and lost your code you should send an Email to HLS customer service at codes@hawkeslearning.com. It would be best to send your name as you had registered with HLS originally, the name of the software, the prior term instructor's name, the term and year of the purchase, and the course for which you made the purchase (DSCI2710 or DSCI3710).

5. **Exams:** There are 2 in-class exams worth 300 points and 1 comprehensive final exam worth 200 points. If a student misses an in-class exam (with an appropriate University approved excuse, as mentioned above) the final can be used to substitute for the missed exam (as well as for the final exam). For each exam you will be allowed to use formula sheets, notes, textbooks, any calculator, and Tables (please provide your own individual copies of these items).

Taking Online Excel Quizzes: To take a quiz in HLS, open the software as usual and select "WebTest" at the bottom of the page. This will open the Web Test area. Select "Take Test" on the left side of the page. When a new window opens, select "Assigned Test" and "OK." From the "Select a Test" menu you can select the appropriate Excel Quiz, Practice HLS Quiz, or Online HLS Quiz. Quizzes will not open until assigned. Once you select the Begin Test button the clock is running for the assigned time allotted for the Quiz. If you log off before completing the Quiz/Exam, you will receive either a -0- or partial credit for what portion you did complete. Therefore assemble everything you need BEFORE opening the Quiz.

6. **Grading:** The 14 HLS modules are worth a total of 210 points (@ 15 points each); The 4 online Excel case quizzes are worth a total of 60 points (@ 15 points each); The two in-class exams are worth 300 points, and the comprehensive final is worth 200 points.

Point Allocation:

Exams (2 at 150 points each)	300
HLS Tutorials and Excel Quizzes (14*15 pts + 4*15pts)	270
Final Exam	200
TOTAL:	770

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

SCHOOL and UNIVERSITY POLICIES

1. If you wish to register a complaint, you should first discuss your complaint with your instructor. If you wish to carry it further, contact Dr. K. Shumway (Dean of the Business School).

2. The grade of "I" is not given except for rare and very unusual emergencies, as per University guidelines.

3. You are required to take all exams, unless a medical or university excuse is provided. In that case, you should discuss the alternative arrangements with your instructor.

4. Code of Conduct and Ethics: The policies for this course are consistent with those in the University of North Texas Student Guidebook. You are responsible for familiarizing yourself with such information published by the University. All tests will contain the following statement to which you must agree: ***On my honor, I have not given, nor received, nor witnessed any unauthorized assistance that violates the UNTD Academic Integrity Policy.***

5. Students with Disabilities: The College of Business Administration complies with the **Americans with Disabilities Act** in making reasonable accommodations for qualified students with disability. If you have an established disability as defined in the "Act" and would like to request accommodation, please see your instructor as soon as possible. Office hours and phone number are shown at the top of this syllabus.

6. Dates of drop deadlines, final exams, etc., are published in the university catalog and the schedule of classes. Please be sure you keep informed about these dates (and any change thereof).

7. **Grounds for Dismissal from the Course**

   A student can be dismissed from the course with a grade of "WF" for reasons of unsatisfactory progress. Some grounds for unsatisfactory progress are as follows:

   i. The student has more than 3 unexcused assignment returns (such as Excel or HLS, on their final due dates) / absences.

   ii. The student misses an examination (providing no reason) or is caught cheating on an examination.

   If a student is suspected of unsatisfactory progress, the instructor will first issue a warning (oral) to the student. Upon issuance of the warning, the student has three (3) days to provide evidence that supports the student's position. If the student provides satisfactory evidence, the instructor will reinstate him or her into the class.

   If a student misses the final exam, s/he must provide the information stipulated above. If the excuse is acceptable, the instructor will submit an "I" for the final grade and the student must make up the exam within the first two (2) weeks of the following term. If you think you will not be able to complete the class satisfactorily, please drop the course. An "I" grade cannot be used as a substitute for poor performance in class.

   If a student is caught cheating, s/he will be immediately removed from the class with a "WF" grade. To be reinstated, the student must provide substantial evidence to the contrary as coordinated by the Office of Student Life.

DSCI 3710 – Topics

Dates	TOPICS	SECTIONS	CW, HW & ASSIGNM'TS
8/22, 8/24	Course policies **Brief DSCI 2710 Review**	syllabus ch 1 - 9	obtain code
8/29; 8/31	Hypothesis testing for population mean	10.1-10.6	Labor Day next week Download Excel #1

Labor Day: No Class on 9/5

Dates	TOPICS	SECTIONS	CW, HW & ASSIGNM'TS
9/7, 9/12	Testing Hypotheses about proportions and variances	10.7-10.8	Discuss Excel #1
9/14, 9/19	**Review for Exam #1** **Exam #1**	**Chapter 10**	
9/21, 9/26	Test Debriefing Comparing Two Population Means	11.1-11.2	
9/28, 10/3	Paired Differences Comparing Two Population Proportions	11.3 11.4	Download Excel #2
10/5, 10/10	Analysis of Variance	12.1-12.4	Discuss Excel #2
10/12, 10/17	**Exam #2 Review and Test**	**Chapters 11, 12**	
10/19, 10/24	Test Debriefing Simple Linear Regression	13.1-13.7	
10/26, 10/31	More Simple Linear Regression	13.8-13.10	
11/2, 11/7	Multiple Regression	14.1-14.3	Download Excel #3
11/9, 11/14	More Multiple Regression	14.4-14.6	Discuss Excel #3
11/16, 11/21	Qualitative Independent Variables + Pitfalls	14.7-14.8	Download Excel #4
11/23, 11/28	Chi-Square Test for Association	15.1 and 15.3	Discuss Excel #4
11/30, 12/5	Review for Final Exam		

The Comprehensive Final Exam for DSCI3710-001 (the Wednesday class) will be held on
> Tbd
> in Room 240, Founders Hall.

The Comprehensive Final Exam for DSCI3710-002 (the Monday class) will be held on
> TBD
> In Room 240, Founders Hall.

Online registration due dates for the HLS Modules
Registrations due by 11:59 p.m. on 12/13 (but earlier is better): 14 x 15 pts. = 210 pts.

No.	Module	
1	10.4a	Testing a Hypothesis about a Population Mean (Z-value)
2	10.4b	Testing a Hypothesis about a Population Mean (t-value)
3	10.4c	Testing a Hypothesis about a Population Mean (p-value)
4	10.7a	Testing a Hypothesis about a Population Proportion (z-Value)
5	10.7b	Testing a Hypothesis about a Population Proportion (p-value)
6	11.1	Comparing two population means
7	11.2	Comparing two population means: Small Samples, Sigma Unknown
8	11.3	Paired Difference
9	11.4	Comparing 2 population proportions
10	12.2-12.4	ANOVA
11	13.1-13.5	Fitting a Linear Model
12	13.8	Regression Analysis
13	14.5a	Inference Concerning the Multiple Regression Model and its Coefficients
14	14.5b	ANOVA Regression
15	14.7	Models with Qualitative Independent Variables
16	15.3	Chi-Square Test for Association Between Two Qualitative Variables

If you certify but are unable to register a certification, come see me. No modules are accepted after 12/13 midnight. Note: there are 16 modules listed but only 14 are required. Any modules over 14 will be counted as extra credit.

Quizzes: Printed analysis results are required for completion of online quiz on each Excel case. Your grade on the Excel case is based on the quiz: 4 x 15 pts. = 60 pts.

Number	Topic	Quiz Dates
Excel CASE 1	Comparing population Means (Finance)	by 12/13/2016
Excel CASE 2	1 way ANOVA	by 12/13/2016
Excel CASE 3	Multiple Regression	by 12/13/2016
Excel CASE 4	Chi-Square test	by 12/13/2016

Each excel case is evaluated using a short quiz based on it, given using WEBTEST on the due date. The quiz contains 5 questions and students need to use their own analysis printout to answer the questions.