

# **Business Statistics with Spreadsheets | DSCI 3710 - 002**

Tuesday 6:30 - 9:20 pm - BLB 080

## **Instructor Contact**

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## **Required Course Material & Software**

- **COURSE WEB SITE(S)**: <u>learn.hawkeslearning.com</u> for course material. We also will make use of UNT's Canvas Learning Portal.
- **REQUIRED SOFTWARE -1:** Hawkes Learning: Discovering Business Statistics 2<sup>nd</sup> Edition by Nottingham and Hawkes

This software is REQUIRED to complete the assigned work (organized in Modules) for the class. Your personal access code to the software will enable you complete the lesson certifications and Web-based tests, (called HLS lessons and Module Quizzes). The software may be purchased online at <a href="Hawkes Learning website">Hawkes Learning website</a> (<a href="http://learn.hawkeslearning.com/">http://learn.hawkeslearning.com/</a>) after first creating a student account at that website. (<a href="https://www.hawkeslearning.com/Students.htm#anchor-newStudents">https://www.hawkeslearning.com/Students.htm#anchor-newStudents</a>).

Once you have purchased the access-rights to the software, you may complete any/all class-work using HLS Network version accessed through the <a href="https://learn.hawkeslearning.com/Portal/User/Login?ReturnUrl=%2fPortal">https://learn.hawkeslearning.com/Portal/User/Login?ReturnUrl=%2fPortal</a>). When registering for the course, be sure to enter your name as the registrar at UNT has it; and choose University of North Texas-Denton as the campus. **Remember to choose the correct instructor.** 

If you took DSCI 2710/3710 and have an access code <u>for the above product</u>, then you can <u>reuse</u> it. If you have an access code for <u>the 1<sup>st</sup> edition of Discovering Business Statistics</u>, you should be <u>able to upgrade to the 2<sup>nd</sup> edition at no extra cost.</u>

Please see the **Student Getting Started Directions** page at the end of this syllabus. (@ page # 9).

- **RECOMMENDED SOFTWARE -2:** Microsoft Excel with Data Analysis
  You may be familiar with Excel; but its essential use for this course is illustrated in the Text (under
  the "Discovering Technology' segment) and on the <u>Hawkes Learning website</u> (Links to an external
  site.). As a UNT student, you can <u>install Microsoft Office for free through the UIT Help Desk</u> (Links
  to an external site.).
- Optional Books: <u>Any Excel Primer</u> Most of you had an Excel reference in BCIS 2610 that will suffice.

#### **GOALS**

At the end of the course, students 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 and decision making,
- 3. be better able to read, understand and 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.

### **TEACHING METHOD**

- 1. Students are encouraged to pay attention to commercials and news items in print, as well as audiovisual media to become aware of the wide use of statistics in our daily lives. 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 be required to complete modules in **Hawkes Learning Systems (HLS): Discovering Business Statistics 2e**. This process is intended to help students make more efficient use of their time in learning how to solve problems.
- 3. The use of spreadsheets in analyzing business data will be stressed.
- 4. You should work on the homework assignments (HLS lessons and quizzes). The Hawkes Learning

quizzes and the Hawkes Learning lessons are intended to assist you in better structuring the learning time you spend on mastering the course material. The best way to prepare for exams is to go over the practice exams posted on Canvas.

### **EVALUATION**

To demonstrate their ability to use quantitative techniques in business, students will complete the tutorials and quizzes (Hawkes Learning Systems: Discovering Business Statistics 2e) and answer exam questions based on short data analysis situations. Wherever possible, rather than being purely numerical, problems will be presented in word format. The exams and assigned work reinforce the course objectives by simulating real business problems that require students to communicate.

### **CAMPUS CLOSING POLICY**

In the event of an official campus closing, please check your UNT e-mail account (EagleConnect) or the HLS notice system for instructions about how to turn in various assignments, how the due dates are modified, etc.

#### **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. Students are encouraged to keep up with the homework and meet the submission deadlines.
- 2. You should not hesitate to ask questions to me, (the professor, Dr. Tarakci). Since we do not meet in person in class, such questions become even more important for an online class.
- 3. Regular monitoring of the course material posted on Canvas is expected. 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. Students have the final responsibility for seeing that they properly withdraw before the scheduled last drop day, in case they wish to withdraw from/ drop the course. 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 the ITDS department for their final grade in the course. Final grades are only available electronically.

### **DSCI 3710 COURSE- SPECIFIC POLICIES**

1. <u>Homework:</u> Homework is assigned and should be completed when due. While only the HLS modules (tutorials), Exams and Quizzes on are graded, all reading material is testable, even if it is not emphasized in the lecture.

- 2. <u>Tutorial Exercises:</u> Tutorial exercises, also referred to as modules and lessons using the Hawkes Learning Systems: Business Statistics (HLS) are assigned. The due dates for the tutorials using HLS software are assigned in this 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 as well as bonus points (two extra credit points per module). On completion of a module in a COB lab, or at home, you should save the HLS certification code to your disk. <u>If you are connected to the internet</u> the module will register automatically <u>but always double check that you have received credit by going to your progress report</u>. To get the credit for an HLS lesson, you need to complete the "Certify" section of that lesson. If there is any problem, exit HLS and then go to your course HLS Web site at learn.hawkeslearning.com.
  - a. Late tutorial submissions still receive full credit, provided they are registered by **the end of** day on
  - b. May 9, 2025; however, no bonus points are earned. No credit is awarded for any tutorial exercise completed after this date. 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. PLEASE SEE PAGE 9 of this syllabus for detailed instructions. If you previously purchased the software and lost your code you should either visit <a href="http://www.hawkeslearning.com/Support/GetYourAccessCode/AccessCodeLookup.htm">http://www.hawkeslearning.com/Support/GetYourAccessCode/AccessCodeLookup.htm</a> or send an E-mail 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). See page 9 of this syllabus for a full set of HLS instructions. You can also download (save) a comprehensive set of instructions directly from the HLS web site by going to:

    <a href="http://www.hawkeslearning.com/Support/InstallationInstructions.htm">http://www.hawkeslearning.com/Support/InstallationInstructions.htm</a>. In addition, there is a more detailed or full set of student directions that walk through the product completely on that page.
- 3. **Exams and Quizzes:** There is one mid-term exam and one comprehensive final exam. Each one is worth **250 points. Both of these exams will be available on Canvas.** No make-up exams are given, however, if a student misses the first exam (with an appropriate University approved excuse, as mentioned above) the final will be used to substitute for the missed exam (as well as for the final exam). Each exam will be open book, open notes, open laptop etc. You only get one attempt for each exam.
  - a. Each of the **two (50 points each) Online HLS quizzes** is a summary test of the modules completed prior to them. For these Online HLS quizzes, you get unlimited attempts. You can complete a quiz past its due date but with a 25% penalty. Any issues related to on time completion or credit for the modules and online quizzes should be resolved with the instructor within one week following their respective due dates. Such issues cannot be considered weeks later and especially not during compilation of the final grades, at the end of the semester.
- 4. Taking HLS Quizzes: To take a quiz in HLS open the software as usual and select Web Test 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 Online HLS Quiz. These Quizzes will not open until the dates as posted in the progress report or as announced in class. 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, you will receive either a -0- or partial credit for the portion you completed. Therefore, get everything you need BEFORE opening the Quiz.

5. **Grading:** The 16 HLS modules are worth a total of 400 points (@ 25 points each); The 2 HLS quizzes are worth a total of 100 points (@50 pts. each); The mid-term exam and the final exam are worth 250 points each.

### **Point Allocation:**

Mid-term Exam		250
HLS Tutorials (16*25 pts)		400
HLS quizzes (2 * 50 pts)		100
Final Exam		250
	TOTAL:	1,000

**Extra Credit:** Each HLS Tutorial/Lesson that you finish on time earns you 2 extra credit points. That means a student who finishes all tutorials on time will receive 32 points in addition to the 400 points for homework. These extra credit points are added to your total but the maximum score is still out of 1,000 points.

1. **Letter Grades:** If you achieve the following thresholds below, you are **guaranteed** to receive the letter grade listed next to them:

 $\geq$  900 points  $\rightarrow$  A  $\geq$  800 points  $\rightarrow$  B  $\geq$  700 points  $\rightarrow$  C  $\geq$  600 points  $\rightarrow$  D < 600 points  $\rightarrow$  F

## **DEPARTMENT, COLLEGE, and OTHER POLICIES**

- 1. To be eligible for enrollment in upper level business courses, students must have satisfied **all** of the following requirements:
  - a. A 2.70 grade point average
  - b. Completion of 45 hours of the pre-business course work,
  - c. Completion of **DSCI 2710** or equivalent a grade of C or better. **DSCI 2710** requires **MATH 1100 and 1190** as well **BCIS 2610**. In addition, students are required to have completed: Accounting 2020 with grade "C" or better and Economics1100.
  - d. If you are a business major (including business undecided or pre-accounting majors) enrolled in upper level business courses and do not meet these requirements, please drop the upper level courses immediately in order to receive a refund of your tuition. If you choose not to

drop, the Dean's office will administratively cancel your enrollment in those courses. In that event, you will **not** receive a tuition refund.

- 2. 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. Hakan Tarakci <a href="hakan.tarakci@unt.edu">hakan.tarakci@unt.edu</a> (the course coordinator) and then the ITDS Department Chair (Dr. Anna Sidorova, <a href="main.ana.sidorova@unt.edu">anna.sidorova@unt.edu</a>), but **only after discussing it with your instructor**.
- 3. As a general rule, the course format requires **no make up exam** be given. The grade of "I" is not given except for rare and very unusual emergencies, as per University guidelines.
- 4. You are required to take all exams, unless a written medical excuse is provided. In that case, you should discuss the alternative arrangements with your instructor. Please have a picture ID in your possession when taking all exams.
- 5. Academic integrity: This course adheres to the UNT policy on academic integrity. The policy can be found at <u>UNT Academic Integrity</u>. If you engage in academic dishonesty, you will receive a failing grade on the test or assignment or a failing grade in the course. In addition, the case may be referred to the Dean of Students for appropriate disciplinary action.
- 6. 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 an accommodation, please see your instructor as soon as possible. Office hours and the email are shown at the top of this syllabus.
- 7. Dates of drop deadlines, final exams, etc., are published in the university catalog and the schedule of classes. Please keep us informed about these dates (and any changes thereof).
- 8. Grounds for Dismissal from the Course

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

- a. The student has more than 3 un-excused assignment returns (such as Excel or HLS, on their final due dates).
- b. The student misses (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) actual days to provide evidence supportive of the student's position. For any missed exam, the following evidence will be accepted as a tenable excuse:
  - \* Written and valid doctor's excuse for illness
  - \* Inability to reach class due to inclement weather (i.e. ice and/or snow, flooding, etc.)
  - \* Valid UNT sponsored event (must provide signed reference from head of sponsoring department.)

If the student provides satisfactory evidence, the instructor will reinstate him or her into the class.

If a student misses the final exam, he or she must provide the information stipulated above. If the excuse is acceptable, the instructor will submit an "I" for the final grade. This is the only circumstance in which an "I" grade will be awarded. If you think you will not be able to complete the class

# satisfactorily, please drop the course. An "I" grade cannot be used to substitute your poor performance in class.

If a student is caught cheating, he or she will be immediately removed from the class with a "WF" grade. To be reinstated, the student must provide <u>substantial</u> evidence to the contrary in a hearing held in the Dean of Students Office, University of North Texas.

The next page is a tentative outline for the semester. It is meant to be a guide and several items are subject to change. Exams and quizzes may be moved to better accommodate any changes in class pace. Certain topics may be stressed more or less than indicated.

## **DSCI 3710 – Topics**

NOTE: THE DATES BELOW ARE TENTATIVE. FOR THE MOST UP-TO-DATE

INFORMATION, REFER TO HAWKES AND CANVAS.

(HLS# means HLS: Business Statistics tutorials)

For important add/drop etc. dates, see <a href="http://registrar.unt.edu/registration/fall-registration-guide">http://registrar.unt.edu/registration/fall-registration-guide</a>

WEEK TOPICS Assignments Due

Week 1 (Jan 15)

**Course Policies** 

HLS1: 10.1: Introduction to Hypothesis Testing

HLS: Obtain authorization code

Week 2 (Jan 22)

HLS2: 10.2 Testing a Hypothesis about a Population Mean,

Sigma Known

Week 3 (Jan 29)

HLS3: 10.3 Testing a Hypothesis about a Population Mean,

Sigma Unknown

**Week 4 (Feb 5)** 

HLS4: 11.1 Comparing Two Population Means,

Sigma 1 and Sigma 2 Known

HLS 10.1, 10.2, and 10.3 are due by 11.59 pm on Sun, Feb 9<sup>th</sup>.

Week 5 (Feb 12)

HLS5: 11.2 Comparing Two Population Means,

Sigma 1 and Sigma 2 Unknown

Week 6 (Feb 19)

HLS6: 11.3 Paired Difference Test

Week 7 (Feb 26)

HLS7: 12.1 Introduction to Analysis of Variance (ANOVA)

HLS8: 12.3 The F-Distribution and the F-Test

HLS 11.1, 11.2, and 11.3 are due by 11.59 pm on Sun, Mar 2<sup>nd</sup>.

Week 8 (Mar 5)

Exam I | Online 7-9 pm with lockdown browser

HLS 12.1 and 12.3 are due by 11.59 pm on Sun, Mar 9<sup>th</sup>.

HLS Quiz 1 is due on Sun, Mar 9th.

\*\*\* Quiz 1 on HLS modules 10.1, 10.2, 10.3, 11.1, 11.2, 11.3, 12.1, and 12.3 for 50 points \*\*\*

Wednesday, March 5th
\*\*\*\*\*\* EXAM 1 \*\*\*\*

Will be available online on Canvas from 7 to 9 PM – Exam is 75 minutes.

## Week 9 (Mar 12)

### NO CLASSES. ENJOY YOUR SPRING BREAK.

## Week 10 (Mar 19)

HLS9: 10.5 Testing a Hypothesis about a Population Proportion

HLS10: 11.4 Comparing Two Population Proportions

### Week 11 (Mar 26)

HLS11: 16.3 The Chi-Square Test for Association

## Week 12 (Apr 2)

HLS12: 13.1 The Simple Linear Regression Model

HLS 10.5, 11.4 and 16.3 are due HLS13: 13.3 Evaluating the Fit of the Linear Regression Model by 11.59 pm on Sun, Apr 6<sup>th</sup>.

Week 13 (Apr 9)

HLS14: 14.1 The Multiple Regression Model

HLS15: 14.2 The Coefficient of Determination

and Adjusted R^2

Week 14 (Apr 16)

HLS16: 14.5 Models with Qualitative Independent Variables

## Week 15 (Apr 23)

Catch up and Review Exam II

HLS 13.1, 13.3, 14.1, 14.2 and 14.5 are due by 11.59 pm on Thu, May 1st.

HLS Quiz 2 is due on May 1st.

\*\*\* Quiz 2 on HLS modules 10.5, 11.4, 16.3, 13.1, 13.3, 14.1, 14.2, and 14.5 for 50 points\*\*\*

## Week 16 (May 6) – Exam II (Finals)

May 6th

\*\* COMPREHENSIVE FINAL EXAM \*\*

Will be available online on Canvas from 8 to 10 PM – Exam is 75 minutes.

## Student Getting Started Directions – see <a href="http://www.hawkeslearning.com/">http://www.hawkeslearning.com/</a> for help TO GET THE ACCESS CODE FOR YOUR COURSE:

- 1. Go to http://www.hawkeslearning.com/Support/GetYourAccessCode.htm. Phone HLS at 843-571-2825 for help
- 2. There will be three options on the above link and each option is explained clearly.
- 3. Choose the appropriate option that is applicable to you (for example "Purchase an access code")
- 4. If you are purchasing the access code anew, you will be taken to a secure site, where you will be asked to enter your credit card information. Please note that the address information MUST match the billing address of the credit card.
- 5. After your credit card information has been verified, you will be taken to a page where you will request an Access Code by entering your name, school, and email address.

Upon submitting the Access Code request, your Access Code will be emailed to you as well as displayed on the screen.

#### TO ENROLL IN YOUR INSTRUCTOR'S GRADEBOOK:

You will automatically be asked to enroll in your instructor's gradebook the first time that you log in to the software. Choose your instructor's name and the correct section from the pull-down menus.

### TO CERTIFY (DO YOUR ASSIGNMENT IN THE SOFTWARE):

- 1. The **Certify** option is where you will complete your assignment.
- 2. After certifying, you will be given a certification code (this verifies that you completed your assignment). It is recommended that you print and/or save your certification code.
- 3. **a.** If you have internet access, you should receive a message that says your certificate has been submitted in your instructor's gradebook. You are now done with that assignment! If you do not receive this message, follow the directions under "b.".
  - **b.** If you do not have internet access, you will need to save the certification code file to a disk and upload the saved file from your disk on the internet from campus to get credit for your assignment in your instructor's gradebook. To do
  - this, go to https://course.hawkeslearning.com/UNTDBS/Default.asp and log in using your access code
    - click the Submit Certificate(s) link
    - select the Lesson Name from the drop down list. Load your certification code from a disk and click OK. Your certification code is now submitted!
    - you need to perform these steps after you Certify to get credit for each of your assignments
- \* Be sure you submit your Certification Code ON or BEFORE the due date to get full credit for the assignment.