

## DSCI 3710.001– Summer 2020 5W2 – Syllabus

**CLASS (DAY/TIME/LOCATION):** NOT APPLICABLE (ONLINE SECTION)

**INSTRUCTOR:** Dr. Hakan Tarakci

**OFFICE:** BLB 358C      **PHONE:** (940) 565-3116

**E-MAIL:** [hakan.tarakci@unt.edu](mailto:hakan.tarakci@unt.edu)

**OFFICE HRS:** Email only

**COURSE WEB SITE(S):** <https://course.hawkeslearning.com/UNTDBS/> for course material.  
We also will make use of UNT's Canvas Learning Portal.

### **REQUIRED SOFTWARE:**

**Discovering Business Statistics**, by *Hawkes Learning Systems* (HLS),

**ISBN 13: 978-1-941552-85-8** (Courseware + eBook\*).

(\*Included eBook can only be accessed online through the courseware)

The software access code is **required** to complete the assignments. If you took DSCI 2710/3710 and have an access code **for the above product**, then you can **reuse** it. If you have an access code for **a different product**, then you will **have to buy a new code**.

**You can do your HLS assignments by accessing HLS over the web at:**

<a href="https://learn.hawkeslearning.com/Portal">https://learn.hawkeslearning.com/Portal</a>
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**IMPORTANT:** When you purchase the Hawkes access code for \$85, you also get free access to the digital version of the textbook. This is probably cheaper than buying the digital textbook through the bookstore. Unless you want the hard copy of the textbook, I'd recommend simply purchasing the Hawkes code.

*If however you wish to install the software on your personal laptop, then please see the links below, which include a training video link. There is unfortunately no installation for MAC computers.*

- **Student Compact or Complete** (larger file with audio/video Install for PC, Version 15.0.1.  
(<http://fileburst.hawkeslearning.com/v15/dbs-student-setup.exe>) (Compact)  
<http://fileburst.hawkeslearning.com/v15/dbs-student-setup-full.exe> (Complete) followed by its update at <http://fileburst.hawkeslearning.com/v15/v15-cumulative-updates.exe>
- HLS training video: <http://tv.hawkeslearning.com/Video.htm?PlayerID=2956123671001>
- Note: Hawkes Course ID is “**UNTDBS**” for installation

Please see the **Student Getting Started Directions** page at the end of this syllabus.



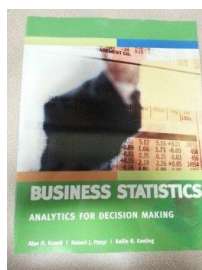
**RECOMMENDED BOOK (for further reading/comprehension):**

**Discovering Business Statistics by Nottingham/Hawkes, Hawkes Learning,  
ISBN 13: 978-1-941552-69-8 (Courseware + eBook\* + Textbook (HARD COPY)).**

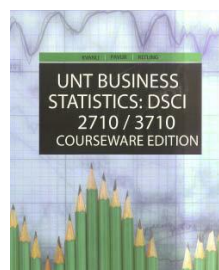


(\*Included eBook can only be accessed online through the courseware)

**Recommended Reading:**



OR



ISBN-10: 0495984949

ISBN-13: 978-0495984948

**Optional Books:** Any Excel Primer - 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): Business Statistics**. 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 Excel case studies). The case studies and the Hawkes Learning lessons are intended to assist you in better structuring the learning time you spend on mastering the course material. Exam questions will mostly refer to these assigned exercises. 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 (**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 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) or the teaching assistant. 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. **Homework:** Homework is assigned and should be completed when due. While only the HLS modules (tutorials), WEBTESTS and Quizzes on Excel cases are graded, all reading material is testable, even if it is not emphasized in the lecture.
2. **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. **For each Excel Quiz, you will get two attempts and the highest one will count.** Note: If you miss any Excel Quizzes or get a low score in one, I may replace that low or zero score with 50% of the maximum quiz score.
3. **Tutorial Exercises:** Tutorial exercises, also referred to as modules and homeworks, 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**. **If you are connected to the internet** the module will register automatically **but always double check that you have received credit by going to your progress report.** If there is any problem, exit HLS and then go to your course HLS Web site at <https://course.hawkeslearning.com/untbstat/default.asp>.

Late tutorial submissions still receive full credit, provided they are registered by **the end of day on August 8, 2020**; 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 11 of this syllabus for detailed instructions. If you previously purchased the software and lost your code you should either visit*

<http://www.hawkeslearning.com/Support/GetYourAccessCode/AccessCodeLookup.htm> or send an E-mail to HLS customer service at [codes@hawkeslearning.com](mailto: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 11 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: <http://www.hawkeslearning.com/Support/InstallationInstructions.htm>. In addition, there is a more detailed or full set of student directions that walk through the product completely on that page.

4. **Exams:** 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. Any issues related to on time completion or credit for the modules and online quizzes/exams 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.

**Taking Online Excel 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 Excel 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/Exam, you will receive either a -0- or partial credit for what portion you did complete. 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 4 online Excel case quizzes are worth a total of 100 points (@25 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
Online Excel quizzes (4 * 50 pts)	100
<u>Final Exam</u>	<u>250</u>
TOTAL:	1,000

**Extra Credit:** Each HLS Tutorial 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.

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

≥ 900 points → A  
 ≥ 800 points → B  
 ≥ 700 points → C  
 ≥ 600 points → D  
 < 600 points → 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 Economics 1100.

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 [hakan.tarakci@unt.edu](mailto:hakan.tarakci@unt.edu) (the course coordinator) and then the ITDS Department Chair (Dr. Leon Kappelman, [leon.kappelman@unt.edu](mailto:leon.kappelman@unt.edu)), 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 <http://vpaa.unt.edu/academic-integrity.htm>. 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 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 be sure you keep informed about these dates (and any change thereof).
8. **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 un-excused assignment returns (such as Excel or HLS, on their final due dates).

ii. 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 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 substantial 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, HT means **Hypothesis Testing**.)

For important add/drop etc. dates see <https://registrar.unt.edu/registration/summer-registration-guide>

WEEK	TOPICS	HLS and Excel Assignments
Week 1 (July 6-12)	Course policies Introduction of Hypothesis testing Hypothesis Testing Means: z Value Hypothesis Testing Means: t Value Hypothesis Testing Means: P Value Hypothesis Testing - Two Means Sigma Known Hypothesis Testing - Two Means Sigma Unknown <b>Excel Quiz 1</b>	Dates assignments are covered in class – due dates are listed in HLS  <b>HLS0: Obtain authorization code</b> <b>HLS1: 10.4a HT means (Z-value)</b> <b>HLS2: 10.4b HT mean (t-value)</b> <b>HLS3: 10.4c HT means (p-value)</b> <b>HLS4: 11.1 HT 2 means (<math>\sigma</math> known)</b> <b>HLS5: 11.2 HT 2 means (<math>\sigma</math> unknown)</b>
Week 2 (July 13-19)	Hypothesis Testing - Two Means (Dependent Samples) Introduction of ANOVA Hypothesis Testing Proportions: z Value One-way analysis of variance. <b>Exclude calculations for test for equality of variance and hand calculation for Tukey test</b> <b>Excel Quiz 2</b>	<b>HLS6: 11.3 Compare <math>\mu</math>'s (dep. n)</b> <b>HLS7: 12.2-12.4 ANOVA</b> <b>HLS8: 10.7a HT proportions (Z)</b>
Week 3 (July 20-26)	Hypothesis Testing for One Proportion: P Value Comparing two population props. - large independent samples.	<b>HLS 9: 10.7b HT prop. (p-value)</b> <b>HLS 10: 11.4 HT 2 proportions</b>

**Sat, July 25<sup>th</sup> – Sun, July 26<sup>th</sup>**

**\*\*\*\*\* EXAM 1 \*\*\*\*\***

**Will be available online on Canvas from Sat morning to Sun night**

WEEK	TOPICS	HLS and Excel Assignments
Week 4 (July 27- Aug 2)	Chi-Square test for independence/homogeneity <b>Exclude pooling of contingencies</b> Chi-Square test: p-values using Chi-square tables Scatter Plots and Correlation Simple linear regression, model assumptions, meaning of $s^2$ Simple linear regression: hypothesis test and C.I. for slope Coefficient of determination, danger of assuming causality. <b>Exclude t-test for rho</b> <b>Excel Quiz 3</b>	<b>HLS11: 15.3 Chi-sq. test for association</b>  <b>HLS12: 4.8 Scatter Plots &amp; Corr</b> <b>HLS13: 13.1-13.5 Fit linear model</b>  <b>HSL14: 13.8 Regression I</b>
Week 5 (August 3-7)	Estimation/Prediction Residual analysis Dummy variables Multiple regression <b>using Excel</b> Global F- test vs individual t-tests <b>Excel Quiz 4</b>	<b>HLS 15: 14.5a Multi regression</b> <b>HLS 16: 14.5b ANOVA regression</b>
<p style="text-align: center;"><b><u>Fri, Aug 7<sup>th</sup></u></b>  <b>** COMPREHENSIVE FINAL EXAM **</b>  <b>Will be available online on Canvas the whole day on Friday</b></p>		

**Assignment Due dates: Online registration due dates for the HLS: Business Statistics (HLS) Modules are shown in your HLS Progress Report. All modules are due by 11:59 pm of the slated due date.**

(16 x 25 pts. = 400 pts)

No.	Module #	Module Name	Due Date
1	10.4a	Hyp. test for $\mu$ (Z-value)	July 12 <sup>th</sup>
2	10.4b	Hyp. test for $\mu$ (t-value)	
3	10.4c	Hyp. test for $\mu$ (p-value)	
4	11.1	Comparing two means (sigma known)	
5	11.2	Comparing two means (sigma unknown)	
Excel Quiz #1			
6	11.3	Comparing means (depend n)	July 19 <sup>th</sup>
7	12.2-12.4	ANOVA	
8	10.7a	Hyp. test for proportions (Z-value)	
Excel Quiz #2			
9	10.7b	Hypothesis test for proportions (p-value)	July 26 <sup>th</sup>
10	11.4	Comparing 2 proportions (large independent samples)	
11	15.3	Chi-sq. test for association	Aug 2 <sup>nd</sup>
12	4.8	Scatter plots and Correlation	
13	13.1-13.5	Fit linear model	
14	13.8	Regression analysis I	
Excel Quiz #3			
15	14.5a	Multiple Regression	Aug 7 <sup>th</sup>
16	14.5b	ANOVA regression	
Excel Quiz #4			

Module registration is due by (11:59pm) of due date as “logged-in” on the WEB registration system. After completing a module in a COB lab, campus lab or done at home you should save the HLS certification code to your disk. You cannot enter certification codes by typing in the code.

Late certifications are accepted for full credit but no bonus points. If you certify but are unable to register, send an Email with your certification code and describing the problem to your instructor within 24 hours of the system error. Any issue related to tardy/ late submission of modules are to be taken care of within one week of their respective due dates. No late modules are taken after **Aug 8<sup>th</sup>, 2020**.

**Student Getting Started Directions – see <http://www.hawkeslearning.com/> 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 DOWNLOAD and INSTALL THE HLS SOFTWARE AT HOME: use the update option instead if you have a version from a prior term** *(direct links for download are on page 1 of this syllabus. You can use those or follow the instructions below)*

1. Go to the HLS site and select the “Students” -> “Download the Software” link or go directly to <http://www.hawkeslearning.com/Support/Downloads.htm>
2. Select “**Business Statistics (all other titles or software only)**” product from the drop down list.
3. Click on the “**Student Complete Install for PC**” download option. **(Release date: 07/17/2015, Version: 15.0.1);**
4. When prompted, save the Installer program to your Desktop folder. **Download an install any update files too.**
5. After the file is saved to your desktop, double click on it to begin the installation. Please follow the prompts.
6. When prompted for the **Hawkes Course ID** enter **UNTDBS** in the box provided.  
-If you do not have internet access, select “No, I will not be accessing an online progress report from this computer.”

**TO ENTER THE SOFTWARE AND SAVE YOUR ACCESS CODE:**

1. Double-click on the purple diamond icon on your Desktop (or go to Start, Programs, Hawkes Learning Systems).
2. Enter your access code when prompted. You may type it, paste it, or load it from a disk (if you saved it from e-mail) by clicking the “F1-Load From Disk” option and browsing to the path where you saved it. If you type or paste your access code, you will be prompted to save it. Save your access code to a floppy disk or another option to avoid typing it each time.

**TO ENROLL IN YOUR INSTRUCTOR’S GRADEBOOK:**

1. **If you have internet access** and have entered your **Hawkes Course ID** (which is **UNTDBS**), 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.
2. **If you do not have internet access** on the computer where the software is installed, you will need to enroll in your instructor’s gradebook by going to [www.hawkeslearning.com/UNTDBS](http://www.hawkeslearning.com/UNTDBS). After entering your Access Code, you will be prompted to 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.**