# DSCI 3710.002– Fall 2024

# Business Statistics with Spreadsheets

# – Syllabus

**CLASS (DAY/TIME/LOCATION):** Wednesday 6:30 PM – 9:20 PM, BLB 140

**INSTRUCTOR:** Lanlan Zhu

**PHONE:** (940) 268-9670

**OFFICE HRS:**  Tuesday (Zoom) 7:00 PM -8:00 PM

 Wednesday (Zoom) 8:30 AM – 9:30 AM

 Friday (Zoom) 3:30 PM -4:30 PM or by appointment

Zoom link: <https://unt.zoom.us/j/7117429662>

**E-MAIL (preferred):** Lanlan.zhu@unt.edu

**Response Times:** (1) For emails/phone calls: 24 hours; (2) For Quiz and Exam Grades/Feedback: 24-48 hours after the quiz/exam closes.

**COURSE WEB SITE(S)**: [learn.hawkeslearning.com](http://learn.hawkeslearning.com/) for course material.

We also will make use of UNT’s Canvas Learning Portal.

**REQUIRED SOFTWARE:**

### **Hawkes Learning: Discovering Business Statistics 2nd 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 to complete the lesson certifications and Web-based tests, (called HLS lessons and Module Quizzes). The software may be purchased online at [Hawkes Learning website](http://learn.hawkeslearning.com) (<http://learn.hawkeslearning.com/>) after first creating a student account at that website. (<https://www.hawkeslearning.com/Students.htm#anchor-newStudents>). Once you have purchased the access-rights to the software, you may complete any/all class-work using HLS Network version accessed through the [HLS portal (Links to an external site.)](HLS%20portal%C2%A0%28Links%20to%20an%20external%20site.%29)  (<https://learn.hawkeslearning.com/Portal/User/Login?ReturnUrl=%2fPortal>). 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 **for the above product**, then you can **reuse** it. If you have an access code for **the 1st edition of Discovering Business Statistics, you should be able to upgrade to the 2nd edition at no extra cost.**

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

**RECOMMENDED SOFTWARE:**

#### ****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 [Hawkes Learning website (Links to an external site.)](https://www.hawkeslearning.com/Statistics/dbs/technology.html). As a UNT student, you can [install Microsoft Office for free through the UIT Help Desk (Links to an external site.)](https://it.unt.edu/installoffice365).

**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 coursework 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 (Eagle Connect) 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 instructor, Lanlan Zhu).

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), Exams and Quizzes are graded, all reading material is testable, even if it is not emphasized in the lecture.
2. **Tutorial Exercises:** 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**. **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**. 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.

Late tutorial submissions still receive full credit, provided they are registered by **the end of day on**

**Dec 14, 2024;** 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*** <http://www.hawkeslearning.com/Support/GetYourAccessCode/AccessCodeLookup.htm> ***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:[*http://www.hawkeslearning.com/Support/InstallationInstructions.htm*](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.

1. **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. **You only get one attempt for each exam.**
2. **Taking HLS Quizzes:** 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.** 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 the compilation of the final grades, at the end of the semester.

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.

1. **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:** (1)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. (2) Posting a brief introduction about yourself in the **Meet Your Classmates/Introduce Yourself** on Canvas will get 5 extra credit points. Keep in mind that the key benefit of the university experience is connecting with fellow students. Through the introduction, we can know each other better.

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:

≥ 900 points → A

 ≥ 800 points → B

 ≥ 700 points → C

 ≥ 600 points → D

 < 600 points → F

7. **Attendance:** In-person class attendance is expected. No standard accommodations for non‐attending students will be provided. Come on time and stay for the duration of each class. It is critical that you not only attend class meetings, but are fully engaged and participating in such meetings. Excessive absences and/or failure to participate will impact your grade. Remember all assignments and Exams have strict deadlines and time window, complete them within that time.

#### 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.

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 (the course coordinator)and then the ITDS Depart­ment Chair (Dr. Anna Sidorova,
anna.sidorova@unt.edu), but **only** **after discussing it with your instructor**.

3. As a general rule, the course format requires **no makeup 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 [UNT Academic Integrity](https://vpaa.unt.edu/ss/integrity). 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. **ADA Policy:** UNT makes reasonable academic accommodation for students with disabilities. Students seeking reasonable accommodation must first register with the Office of Disability Access (ODA) to verify their eligibility. If a disability is verified, the ODA will provide you with a reasonable accommodation letter to be delivered to faculty to begin a private discussion regarding your specific needs in a course. Students may request reasonable accommodations at any time, however, ODA notices of reasonable accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of accommodation for every semester and must meet with each faculty member prior to implementation in each class. For additional information see the ODA website (<https://disability.unt.edu/>). 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 contact the ODA and your instructor (Lanlan Zhu) 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 ([Fall Academic Calendar & Key Dates | University of North Texas (unt.edu)](https://registrar.unt.edu/registration/fall-academic-calendar.html)). Please be sure you keep informed about these dates (and any change thereof).

8. **Course Evaluation:** Student Perceptions of Teaching (SPOT) is the student evaluation system for UNT and allows students the ability to confidentially provide constructive feedback to their instructor and department to improve the quality of student experiences in the course. The survey will be enabled by the University Administration toward the end of the semester; and will be accessible through your my.unt.edu. Please complete it in the time-window provided.

9. **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:

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: (1) Written and valid doctor's excuse for illness; (2) Inability to reach class due to inclement weather (i.e. ice and/or snow, flooding, etc.) (3) Valid UNT-sponsored event (must provide a signed reference from the 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)**

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| --- | --- | --- | --- |
| **Modules** | **Week** | **Topics** | **Important Dates** |
| Module 1 | Week 1 (Aug 21) | Course PoliciesHLS1: 10.1: Introduction to Hypothesis Testing  | HLS: Obtain authorization code |
| Week 2 (Aug 28) | HLS2: 10.2 Testing Aua Hypothesis about a Population Mean, Sigma Known | Introduction due by 6:30 PM on **Aug 28** (5 points). |
| Week 3 (Sep 4) | HLS3: 10.3 Testing a Hypothesis about a Population Mean, Sigma Unknown |  |
| Module 2 | Week 4 (Sep 11) | 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, Sep 15.** |
| Week 5 (Sep 18) | HLS5: 11.2 Comparing Two Population Means, Sigma 1 and Sigma 2 Unknown |  |
| Week 6 (Sep 25) | HLS6: 11.3 Paired Difference Test |  |
| Module 3 | Week 7 (Oct 2)  | 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, Oct 6**. |
| Week 8 (Oct 9) | EXAM Ⅰ | (1) HLS 12.1 and 12.3 are due by 11.59 pm on **Sun, Oct 13**.(2) HLS Quiz 1 is due on **Sun, Oct 13**. (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). |
| Module 4 | Week 9 (Oct 16) | HLS9: 10.5 Testing a Hypothesis about a Population Proportion HLS10: 11.4 Comparing Two Population Proportions |  |
| Week 10 (Oct 23) | HLS11: 16.3 The Chi-Square Test for Association |  |
| Module 5 | Week 11 (Oct 30) | HLS12: 13.1 The Simple Linear Regression ModelHLS13: 13.3 Evaluating the Fit of the Linear Regression Model | HLS 10.5, 11.4, and 16.3 are due by 11.59 pm on **Sun, Nov 3.** |
| Week 12 (Nov 6) | HLS14: 14.1 The Multiple Regression ModelHLS15: 14.2 The Coefficient of Determination and Adjusted *R2*  |  |
| Week 13 (Nov 13) | HLS16: 14.5 Models with Qualitative Independent Variables |  |
| Week 14 (Nov 20) | Catch up and Review of the Final Exam |  |
| No class | Week 15 (Nov 27) | No classes. Enjoy your Thanksgiving break. |  |
| Week 16 (Dec 4) | No classes. Enjoy your additional break. | (1) HLS 13.1, 13.3, 14.1, 14.2 and 14.5 are due by 11.59 pm on **Thu, Dec 5.**(2) HLS Quiz 2 is due on **Thu, Dec 5.(**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). |
| Final Week | Week 17 (Dec 11) | Comprehensive final exam |  |

**For important add/drop etc. dates see** [**http://registrar.unt.edu/registration/fall-registration-guide**](http://registrar.unt.edu/registration/fall-registration-guide)

**Student Getting Started Directions – see** [**http://www.hawkeslearning.com/**](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 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.**