DSCI 2710.404/406: Data Analysis with

Spreadsheets.

## Instructor Contact

**Name:** Scott Hamilton, PhD

**Pronouns:** He/Him **Office Location:** BLB 367E **Phone Number:**

**Office Hours:** Tues/Thurs 11-1pm also by appointment and via Zoom <https://unt.zoom.us/my/scotthamilton>

**Email:** [scott.hamilton@unt.edu](mailto:scott.hamilton@unt.edu) **(Preferred) Put course name and section numbers in the title.   
*If you email a scotthamilton@my.unt.edu account, I will not see that email.***

# REQUIRED SOFTWARE:

* **Canvas:** The lecture notes, Excel case files, Case quizzes, all of the exams, and other material will be posted on Canvas so please make sure you keep up and check Canvas often.
* **Excel**, installed in the College of Business computer lab and available with unt.edu email
* **COURSE WEB SITE(S)**: You will be using Hawkes Learning materials for this course. To access Hawkes, click the Hawkes Single Sign-On link in the Hawkes Learning Module through Canvas.
* **REQUIRED COURSEWARE: *Discovering Business Statistics*** by Quinton Nottingham and James Hawkes **ISBN:** 978-1-64277-510-5 (Courseware + eBook + Textbook)

### Software access includes the eBook. The hardbound book is not required.

The software access code is **required** to complete the assignments (HLS Modules). If you took DSCI 2710 previously and have an access code **for the above product**, then you can **reuse** it.

 If you need to purchase access, you may do so either from the UNT bookstore or through your Hawkes account. To purchase through Hawkes, simply click the Hawkes Learning link in Canvas and click the Activate button on your dashboard.

**For any questions or technical issues with the Hawkes courseware,** please reach out directly to their Tech Support Team via LiveChat ([http://chat.hawkeslearning.com](http://chat.hawkeslearning.com/)) or phone (1-800-426-9538) (M-F 7 am-9 pm CST)

**Course materials may not be recorded, shared, or uploaded online. This includes, but is not limited to, Zoom calls, instructor videos, and any and all instructional materials.**

# GOALS:

At the end of the course, you should:

1. have an increased appreciation for the use of statistics in business decision-making,
2. be better able to select the appropriate statistical tool/methodology to aid in business decision- making,
3. be able to use a computer spreadsheet program such as **Excel** to describe and analyze numerical data,
4. be better able to communicate in the language of applied business statistics,
5. have acquired a more positive attitude towards business statistics,
6. be able to manipulate simple statistical formulae to solve non-verbal (numerical) problems,
7. have an enhanced ability to follow directions and instructions,
8. have a much better vision of how analytics are used in analysis and business decisions,
9. understand more about the job/career potential of analytics and Decision Sciences.
10. **Think about becoming a Decision Sciences Major!**

# TEACHING METHOD:

* + You are encouraged to pay attention to commercials and news items in print as well as audio- visual media to become aware of the wide use of statistics in our daily lives. To better assist you in understanding the use of these methodologies in business many of the class problems will be presented as simple business cases.
  + You should **study** the material in the PowerPoint slides. You are strongly encouraged to try to independently solve the problems included in the lecture slides, not simply verify that the provided solutions “make sense”.
  + 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:

1. **HLS Lessons:** Homework using the **Hawkes Learning: Discovering Business Statistics** is assigned. The due dates for the **HLS lessons** are listed on this syllabus. These form a significant part of the course grade and **must be completed by the due date** to receive full credit as well as bonus points (two extra credit points per module). Credit for the homework is applied upon the demonstration of mastery in the “Certify” section of the Hawkes Learning portal and there is no partial credit awarded for the homework that does not demonstrate mastery. Late homework submissions still receive full credit, provided they are completed by **the end of day on December 13th, 2025;** however, no bonus points are earned. No credit is awarded for any tutorial exercise completed after this date.
2. **Excel Quizzes / Case Study:** Projects involving the use of **Excel** to analyze business data are assigned. These are an important part of the course grade and include a dataset and an online quiz in Canvas to verify your Excel case comprehension and apply your knowledge on that quiz. There will be one business case study where students will be expected to conduct their own analysis using provided data in a spreadsheet. This will satisfy the Communication component for university accreditation. **Late Penalty: There will be a 5% deduction in points for every day that the submission of the case quiz is late.**
3. **Exams:** There will be two exams in the course with a third makeup exam available for those that miss either the first or second exam. The third exam could also be used to replace a lower score on the previous exams. Final exams are held on the UNT scheduled final exam time (for details on final exam schedule check the site <https://registrar.unt.edu/exams/> )

*INET Sections:* All exams will be available on Canvas. For each exam, you will be given a short period of time (typically about 48 hours), in which you will need to be ready to take the timed exam. More details on the online exams will be posted on Canvas.

**There will be no make-up exams, except in case of excused absences recognized by the University of North Texas (observation of religious holiday, military service or wherein a student is representing the university in an official capacity such as athletics or band). Medical emergency may be considered but must be documented by a medical professional.**

1. **Attendance/Participation:** Students are expected to interact with the class regularly and to abide by the attendance policy established for the course. There will be different Check-In activities throughout the semester that will be defined on Canvas. It is important that you communicate with the professor about any issues or situations that detract from your semester, so you and the professor can discuss and mitigate the impact of the absence on your attainment of course learning goals.
2. **Grading:** The 12 HLS lessons are worth a total of 300 points (@ 25 points each); The 8 Excel case assignments are worth a total of 400 points (50pts) and the course exams offer a total of 250 points (@125 pts each)

### Course Point Allocation:

Exam #1 125

Exam #2 125

HLS Lessons (Hawkes Learning) 300 (25 points each)

Excel case Quizzes 400 (50 points each)

Check-Ins/ Participation 50

TOTAL 1,000

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

≥ 900 points (or ≥ 90%) → A

≥ 800 points (or ≥ 80%) → B

≥ 700 points (or ≥ 70%) → C

≥ 600 points (or ≥ 60%) → D

< 600 points (or below 60%) → F

1. **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 24 points in addition to the 300 points for homework. These extra credit points are added to your total but the maximum score is still out of 1,000 points. There will also be opportunities for extra credit during in-class exercises and activities.

# GENERAL COMMENTS

1. This course is an Introductory Statistics equivalence with the state of Texas (MATH 1342 THECB approval ID: 27.0501.51 19) and involves collection, analysis, presentation and interpretation of data, and probability. Analysis includes descriptive statistics, correlation and regression, confidence intervals and hypothesis testing. Understand that critical thinking, analysis, and evaluation are key to the format of this course.
2. Doing the assignments is essential for success in this course. In fact, the assignments constitute a large portion of your grade in this course. You are encouraged to keep up with the homework and meet the submission deadlines.
3. You should not hesitate to ask questions to me, (the professor, Dr. Hamilton) or the teaching assistant. I will try to keep a FAQ section on Canvas for commonly asked questions.
4. Regular monitoring of the course material posted on Canvas is expected. There will be no make-up if you miss any of the mid-term exams unless you have a University-approved excuse. Whenever applicable, such an excuse is to be provided to the instructor in writing, as early as possible.
5. Since large portions of the course are done in online environments (Hawkes and Canvas) without any in-class monitoring tools, we reserve the right to test you further on your submissions during the semester. We could randomly check your knowledge on the topics and see how you answered the assignments. If it is your work, you will NOT have any issues. Only students who plagiarize will be reported to the Dean of students for further actions. Remember, anything you submit to the class should be your work and you should be able to explain the answer and repeat/show the process again when questioned.
6. You have the final responsibility for seeing that you properly withdraw before the scheduled last drop day, in case you wish to withdraw from/ drop the course. If you stop attending class, you should execute the drop procedure since failure to do so will result in a grade of “F” which cannot be changed.

## DEPARTMENT, COLLEGE, and OTHER POLICIES

1. COMPLAINTS: 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. Scott Hamilton (the course coordinator) and then the ITDS Department Chair Dr. Anna Sidorova, but **only after first discussing it with your instructor**.
2. EXAMS: You are required to take all exams unless a written medical or other UNT- approved excuse is provided. In that case, you should discuss the alternative arrangements with your instructor. As a general rule, the course format does not allow **make-up exams**.
3. ACADEMIC INTEGRITY: This course adheres to the UNT policy on academic integrity. The policy can be found at <https://vpaa.unt.edu/fs/resources/academic/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 reported to the UNT Dean of Students/Academic Integrity Office, which maintains a database of related violations.
4. STUDENTS WITH DISABILITIES: The College of Business complies with the **Americans with Disabilities Act** in making reasonable accommodations for qualified students with disability. If you have an established disability you should register with the Office for Disability Accommodation and receive further instructions. Please see your instructor as soon as possible if you have any questions.
5. DEADLINES: 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.
6. SPOT: The Student Perceptions of Teaching (SPOT) is a requirement for all organized classes at UNT. This short Web-based survey will be made available to you at the end of the semester/session, providing you 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 SPOT to be an important part of your participation in this class.
7. INCOMPLETE GRADE (I): The grade of "I" is not given except for rare and very unusual emergencies, as per University guidelines. An “I” grade cannot be used to substitute your poor performance in class. If you won’t be able to pass, please drop the course.
8. CAMPUS CLOSING: In the event of an official campus closing, please check your UNT e-mail for instructions on how to turn in assignments, how the due dates are modified, etc.

## DSCI 2710 Schedule

|  |  |  |
| --- | --- | --- |
|  | Topics and Sections in Text | HLS Lesson |
| Module 1 | Data Classifications Frequency Distributions  Graphical Displays of  Quantitative Data | 2.3  Chapter 3 Review  Read Chpt 2-3 |
| Module 2 | Measures of Location and Dispersion  Data Subsetting  Proportions  Measures of Association Between Two Variables | 4.1  4.2  Chapter 4 Review (4.3-4.7)  Read Chpt 4 |
| Module 3 | Time Series Components  Simple Moving Averages | Chapter 15 Review  Read Chpt 15.1 - 15.2 |
| Module 4 | EXAM #1 |  |
| Module 5 | The Normal Distribution  The Standard Normal Distribution Continuous Random Variables | 7.4  Chapter 7 Review |
| Module 6 | Continuous Random Variables Distribution  Random Samples and Sampling Distributions | 8.2 Chapter 8 Review (8.1, 8.4)  Read Chpt 8.1-4 |
| Module 7 | Interval Estimation of Population Mean1  (σ Known and σ Unknown) | 9.1  9.2  Read Chpt 9.1 - 9.2 |
| Module 8 | EXAM #2 |  |

**HLS Lesson Due dates:**

**Late submissions forego the 2 points extra credit. No submissions are accepted after:**

**Dec 12th, 2025**

|  |  |  |
| --- | --- | --- |
| Number | HLS Lesson | Due Date |
| 1 | 2.3 Data  Classifications | 8/28 |
| 2 | Chapter 3 Review | 9/04 |
| 3 | Chapter 4 Review | 9/11 |
| 4 | 4.1 Measures of  Centrality | 9/18 |
| 5 | 4.2 Measures of  Dispersion | 10/02 |
| 6 | Chapter 15 Review | 10/09 |
| 7 | Chapter 7 Review | 10/23 |
| 8 | 7.4 The Standard  Normal Distribution | 10/30 |
| 9 | Chapter 8 Review | 11/06 |
| 10 | 8.2 The Distribution of the Sample Mean and the Central Limit  Theorem | 11/13 |
| 11 | 9.1 Estimating the Population Mean,  Sigma Known | 11/20 |
| 12 | 9.2 Estimating the  Population Mean, Sigma Unknown | 12/4 |

## Case Assignments:

* CASE 1 Quiz: Descriptive Statistics
* CASE 2 Quiz: Pivot Tables and Frequency Distributions
* CASE 3 Quiz: Merging Datasets (VLOOKUP) & Descriptive
* CASE 4 Quiz: Forecast / Time Series Analysis
* CASE 5 Quiz: Case Study (Written Communication)
* CASE 6 Quiz: If formulas
* CASE 7 Quiz: Filtering and Sample Distribution
* CASE 8 Quiz: Statistical Functions

## Exams:

* Exam 1 – 10/9
* Exam 2 - 12/4
* Exam 3 - 12/11