



Data Analysis with Spreadsheets

DSCI 2710.501: Tuesday/Thursday 1 – 4:50 pm

Instructor Contact

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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.
- **COURSE WEBSITE(S):** You will use Hawkes Learning materials for this course. To access Hawkes, click the Hawkes Single Sign-On link through Canvas in the Hawkes Learning Module.
- **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.

RECOMMENDED BOOK (for further reading/comprehension):

Discovering Business Statistics by Nottingham/Hawkes, Hawkes Learning, ISBN: 978-1-64277- 510-5

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**, 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 a full tutorial of the Hawkes website, please watch the following video:

<http://tv.hawkeslearning.com/VideoPlayerSingle.htm?PlayerID=5062857235001>

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>) or phone (1-800-426-9538) (M-F 7 am-9 pm CST)

IF YOU ARE LESS FAMILIAR WITH EXCEL:

Any Excel Primer – Any Excel reference that covers material similar to our BCIS 2610 course.

GOALS:

At the end of the course, you should:

- i. have an increased appreciation for the use of statistics in business decision-making,
- ii. be better able to select the appropriate statistical tool/methodology to aid in business decision-making,
- iii. be able to use a computer spreadsheet program such as **Excel** to describe and analyze numerical data,
- iv. be better able to communicate in the language of applied business statistics,
- v. have acquired a more positive attitude toward business statistics,
- vi. be able to manipulate simple statistical formulae to solve non-verbal (numerical)

- problems,
- vii. have an enhanced ability to follow directions and instructions,
 - viii. have a much better vision of how analytics are used in analysis and business decisions,
 - ix. understand more about the job/career potential of analytics and Decision Sciences.
 - x. **Think about becoming a Decision Sciences Major!**

TEACHING METHOD:

- You are encouraged to pay attention to commercials and news items in print and 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 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:

To demonstrate your ability to use quantitative techniques in business, you will be evaluated on a number of homework assignments, Excel case studies, and exam questions. Rather than being purely numerical, exam and case problems will be presented in word format. Many Hawkes Learning (HLS) lesson assignments will also be presented in word format. You will work on Excel case studies that require you to use an Excel spreadsheet to analyze and describe real-world business data. These evaluation instruments will reinforce the course objectives by simulating real business problems and using the language of statistics.

GENERAL COMMENTS

- 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.

- 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. You should not hesitate to ask questions of me or the industrial assistant.
- 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 will result in a “F” grade, which cannot be changed.

DSCI 2710 COURSE- SPECIFIC POLICIES:

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. Each HLS Tutorial has 30 points.
2. **Case Quizzes:** Projects using Excel to analyze business data are assigned. These are an important part of the course grade. For each case assignment, a data set will be provided. These case assignments will use Excel. There will be five (5) online quizzes in Canvas to verify your Excel case comprehension and apply your knowledge on that quiz. **The due date of the Case Quizzes won't be extended**, and you should treat them as hard due dates.
3. **Exams:** There will be two non-cumulative. All exams will be available on Canvas and **in person**. More exam details will be posted on Canvas and discussed in class. Students are required to take both exams.
4. **Attendance:** This class will monitor attendance, and students will receive one (1) bonus point for attending each session. These extra credit points are added to your total, but the maximum score is still out of 1,000 points.
5. **Grading:** The 10 HLS lessons are worth a total of 300 points (30 pts each); The 5 Case Quizzes are worth a total of 400 points (80 pts each), and the course exams offer a total of 300 points (150 pts each).

Course Point Allocation:

Exam #1	150
Exam #2	150
HLS Lessons (Hawkes Learning)	300 (30 points each)
Excel case Quizzes	400 (80 points each)
TOTAL	1,000

6. **Letter Grades:** If you achieve the following thresholds, you are **guaranteed** to receive the letter grade listed next to them:
- ≥ 900 points (or $\geq 90\%$) $\rightarrow$ A
 - ≥ 800 points (or $\geq 80\%$) $\rightarrow$ B
 - ≥ 700 points (or $\geq 70\%$) $\rightarrow$ C
 - ≥ 600 points (or $\geq 60\%$) $\rightarrow$ D
 - < 600 points (or below 60%) $\rightarrow$ F
7. **Communication:** All course-related emails must include **DSCI 2710-501 <subject>** in the subject line. This triggers an alert to draw your instructor's attention to your email. You should expect a response within 48 hours. Emails that don't follow the convention will be missed.
8. **Access to Information:** Eagle Connect Students' access point for UNT business and academic services is at my.unt.edu. All official communication from the University will be delivered to a student's Eagle Connect account. For more information, please visit the website that explains Eagle Connect and how to forward e-mail: <http://eagleconnect.unt.edu/>
9. **Acceptable Student Behavior:** Student behavior that interferes with an instructor's ability to conduct a class or other students' learning opportunities is unacceptable and disruptive and will not be tolerated in any instructional forum at UNT. Students engaging in unacceptable behavior will be directed to leave the classroom. The instructor may refer the student to the Dean of Students to consider whether the student's conduct violated the Code of Student Conduct. The University's expectations for student conduct apply to all instructional forums, including University and electronic classrooms, labs, discussion groups, field trips, etc. The Code of Student Conduct can be found at deanofstudents.unt.edu/conduct.

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 both exams **in person** unless:
 - Communicated in advance (at least a week) to the professor.
 - Emergency: A written medical or other UNT-approved excuse is provided through the Dean of Students' office.

There will be no makeup exam for Exam I and II, and Exam II grade will only be considered for Exam I if one of the above conditions apply.

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. **ADA Accommodation:** 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 Accommodations 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 required for all UNT-organized classes. This short Web-based survey will be available at the end of the semester/session, allowing you to comment on how this class is taught. I am very interested in the feedback I get from students as I work to improve my teaching continually. SPOT is an important part of your participation in this class.
7. **Incomplete Grade (I):** The grade "I" is not given except for rare and unusual emergencies, per university guidelines. An "I" grade cannot be used to substitute for your poor performance in class. Per guidelines, you must pass the course at the decision-making point. If you won't be able to pass, please drop the course.
8. **Emergency Notification & Procedures:** UNT uses Eagle Alert to quickly notify students with critical information in the event of an emergency (i.e., severe weather, campus closing, and health and public safety emergencies like chemical spills, fires, or violence). In the event of a university closure, please refer to the UNT Learning Management System (LMS) for contingency plans for covering course materials.

References and Cross References

[UNT Policy 06.003, Student Academic Integrity](#)

[UNT Policy 06.035, Academic Freedom & Academic Responsibility](#)
[UNT Policy 06.039, Student Attendance and Authorized Absences](#)
[UNT Policy 16.001, Disability Accommodation for Students and Academic Units](#)
[UNT Policy 16.005, Prohibition Against Sexual Misconduct and Retaliation](#)

DSCI 2710 – 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 <http://registrar.unt.edu/registration/spring-registration-guide>

Week	Topics	Assignments Due
Week 1 (Tu – 6/24) (Th – 6/26)	Syllabus Review, HLS – 2.3 HLS – 3.1, 3.2, 3.3, 3.4, 3.5	HLS: Obtain authorization Code HLS 2.3 and Chapter 3 Review Case Quiz #1 – Sunday, 6/29, by 11:59 pm.
Week 2 (Tu – 7/1) (Th – 7/3)	HLS – 4.1, 4.2, 4.3, 4.4 HLS – 4.5, 4.6, 4.7	HLS 4.2 and Chapter 4 Review Case Quiz #2 – Sunday, 7/6, by 11:59 pm.
Week 3 (Tu – 7/8) (Th – 7/10)	Exam I (In Person) & HLS 7.1, 7.2 HLS – 7.3, 7.4	HLS 7.4 and Chapter 7 Review Case Quiz #3 – Sunday, 7/13, by 11:59 pm.
Week 4 (Tu – 7/15) (Th – 7/17)	HLS – 8.1, 8.4 HLS – 8.2	HLS 8.2 and Chapter 8 Review Case Quiz #4 – Sunday, 7/20, by 11:59 pm.
Week 5 (Tu – 7/22) (Th – 7/24)	HLS – 9.1, 9.2 Exam II (In Person)	HLS 9.1 and 9.2 Case Quiz #5 – Friday, 7/25, by 11:59 pm.

DSCI 2710 Modules

Module /Week	Topics	HLS Lesson, Case Quiz, Exam
Module I Week 1	• Data Classifications Frequency Distributions • Displaying Qualitative Data • Constructing Frequency Distributions for Quantitative Data • Graphical Displays of Quantitative Data • Analyzing Graphs	• HLS 2.3 • Chapter 3 Review • Case Quiz #1 – Pivot Tables and Frequency Distributions
Module II Week 2	• Measures of Location Measures of Dispersion • Measures of Relative Position • Data Subsetting • Proportions • Measures of Association Between Two Variables	• HLS 4.2 • Chapter 4 Review • Case Quiz #2 – Frequency Table & Descriptive Stats
Module III Week 3	• The Uniform Distribution • The Normal Distribution • Assessing Normality Graphically • The Standard Normal Distribution • Approximations to Other Distributions	• Exam I • Chapter 7.4 • Chapter 7 Review • Case Quiz #3 – VLOOKUP/XLOOKUP
Module IV Week 4	• Random Samples and Sampling Distributions • The Distribution of the Sample Mean and the Central Limit Theorem • The Distribution of the Sample Proportion • Sampling Methods	• Chapter 8.2 • Chapter 8 Review • Case Quiz #4 – IF LOGICAL OPERATION
Module V Week 5	• Estimating the Population Mean, Sigma Known • Estimating the Population Mean, Sigma Unknown	• Chapter 9.1 • Chapter 9.2 • Case Quiz #5 – View Filter / SUBTOTAL • Exam II