# Business Statistics with Spreadsheets/DSCI 3710/Coursera

## Instructor Information

Dr. Ted Peterson

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Office Location: BLB 385P

Office Hours: Via Zoom/Teams. My office hours are by appointment. I am flexible throughout the week so we can schedule a time to talk.

### Course Description

As a College of Business foundation course, this course is designed for all business majors. Statistics is an essential tool of modern management practice. This course is the second of two sequential courses (DSCI 2710 & DSCI 3710) that emphasize the introductory theory and application of statistical techniques for business decision-making. The focus will be on data collection and interpretation through the application of statistical inference. The statistical techniques taught in this course will be applicable to a variety of management fields, but most importantly they will provide you with the tools to assess the validity and significance of the analyses that will be presented to you during your academic studies and professional career.

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### Course Structure

This Coursera course is administered asynchronously via Canvas. The course is organized into eight weekly modules.

### Course Objectives

1. Become more comfortable with data analysis.
2. Learn how to quantify and present uncertainty.
3. Identify questions to ask when presented with data analysis.
4. Gain an appreciation for the use of statistics in business decision making, develop a positive attitude toward business statistics and how it is relevant for future academic coursework, and in professional settings.
5. Learn how to read, understand, and communicate using the language of applied business statistics.
6. Gain an understanding of how to select and use the appropriate statistical tool or methodology for business decision making.
7. Use statistical formulas to solve problems.

## Required Materials

* 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 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/) 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 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.

**For exams you must use, Respondus Lockdown Browser and Monitor. Therefore, you need to download Lockdown browser software here (download the Student Version)** [**https://clear.unt.edu/supported-technologies/respondus-lockdown-browser**](https://clear.unt.edu/supported-technologies/respondus-lockdown-browser)

**For the exams, you MUST have a working webcam. This can be the camera in your laptop or an external camera. A working webcam is required to take the exams.**

## 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.

## How to Succeed in this Course

I want every student in our course to succeed. There is no substitute for your active engagement. Our course success depends on your participation. That includes 1) reading the required reading 2) completing the chapter quizzes 3) completing the required weekly activities 4) Studying for and taking the exams. Students should plan for ample time to complete these required course activities.

More information on how to be successful in a digital learning environment can be found at [Learn Anywhere](https://online.unt.edu/learn) (https://online.unt.edu/learn).

*Additional assistance* − If you need any additional assistance, simply contact me via email. I am here to help you.

− The Ryan College of Business offers a statistics Lab (Online and In-person). This is available for students seeking additional help. Hours and venue will be announced in class and posted to the course website on Canvas. The purpose of the lab is to assist students to overcome difficulties they may encounter in attempting statistics problems. It is not meant to be an extensive tutoring service. Hours will be announced in class and/or posted on the course website.

ADA Accommodation Statement:

The Ryan College of Business Administration complies with the Americans with Disabilities Act (ADA) in making reasonable accommodations for qualified students with disability. If you have an established disability as defined in the ADA and would like to request accommodation, please notify me as soon as possible.

The University of North Texas 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. You 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 reasonable accommodation for every semester and must meet with each faculty member prior to implementation in each class. Students are strongly encouraged to deliver letters of reasonable accommodation during faculty office hours or by appointment. Faculty members have the authority to ask students to discuss such letters during their designated office hours to protect the privacy of the student. For additional information, refer to the [Office of Disability Access](https://studentaffairs.unt.edu/office-disability-access) website (http://www.unt.edu/oda). You may also contact ODA by phone at (940) 565-4323.

## Supporting Your Success and Creating an Inclusive Learning Environment

*Every student in this class should have the right to learn and engage within an environment of respect and courtesy from others. We will discuss our classroom’s habits of engagement and I also encourage you to review UNT’s student code of conduct so that we can all start with the same baseline civility understanding* ([Code of Student Conduct](https://deanofstudents.unt.edu/conduct)) (https://deanofstudents.unt.edu/conduct)

## Grading

Grades are a measure of the performance of a student in individual courses. 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.

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| --- | --- | --- |
| **Grading Assessment** |  | **Grading Scale** |
| **Component** | **Weight** |  | **Percent** | Grade |
| Two Exams  | 50% |  | 90.0 % or above | A |
| Hawkes Learning Systems (16 tutorials) / Orientation/Intro QuizHawkes Learning Quizzes (two quizzes) | 40% 10% |  | 80.0 - 89 %70.0 - 79 %60.0 - 69 %Lower than 60.0 % | BCDF |
| TOTAL | 100% |  |  |  |

**EXAMS**

There are two exams. If the student does not take an exam, a grade of zero (0) will be recorded for that exam. Exams are administered online via Canvas. Exams require the use of Respondus Lockdown Browser with a working webcam. No make-up exams will be given.

**QUIZZES**

There are two online Hawkes Learning Systems quizzes. Each quiz is a summary test of the modules completed prior to the quiz. For these online quizzes, you get two attempts with the highest score counting. 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. You may turn in the Hawkes Quizzes late but there will be a 25% late penalty. You must turn it in before the end of the semester as stipulated on Canvas or you will not receive any credit.

**HAWKES LEARNING SYSTEMS TUTORIALS**

To master statistics, there is no substitute for practicing and working through the course concepts. Through the Hawkes Learning System Tutorials, you will practice mastering the course material. These form a significant part of the course grade and must be registered onto the Hawkes Learning System module by the due date to receive full credit.

**TO CERTIFY (DO YOUR ASSIGNMENT IN THE HAWKES LEARNNG SYSTEM 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.

**\* Be sure you submit your Certification Code ON or BEFORE the due date to get full credit for the assignment.**

Taking HLS Quizzes: To take a quiz in HLS, you will access those via the direct links in Canvas. 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 starts 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. Keep in mind that you have two attempts on the quiz with the highest score counting in the grade book.

**LATE WORK**

Students who fail to turn in the assignment by the due date may complete the assignment but will incur a three point late penalty. All late work must be completed the day before the last exam for our class. Students with a [university-excused absence](https://policy.unt.edu/policy/06-039) may receive extra time without penalty with provided documentation with 48 hours of the missed deadline.

**GRADE DISPUTES**

You are required to wait 24 hours before contacting me to dispute a grade. Within that time, I expect that you will review the assignment details and reflect on the quality of the work you submitted. If you would still like to discuss the grade, email me to set up a meeting (I cannot discuss grades over email). You should come to our scheduled meeting with specific examples that demonstrate that you earned a higher grade than you received. If you miss your scheduled meeting, you forfeit your right to a grade dispute. If you do not contact me to schedule a meeting within seven days of receiving your grade, you also forfeit your right to a grade dispute.

**EXTRA CREDIT**

Any extra credit offered to students will be offered to all students. Announcements will be made in Canvas should there be any extra credit offered.

## Course Requirements/Schedule

See Canvas for specific due dates for your semester.

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| Date | Topic / Reading  | Assessment Due |
| Week 1 Aug 18 | * HLS1: 10.1: Introduction to Hypothesis Testing
* HLS2: 10.2 Testing a Hypothesis about a Population Mean, Sigma Known
* HLS3: 10.3 Testing a Hypothesis about a Population Mean, Sigma Unknown
 | * HLS: Obtain authorization code Chapter 1 Quiz
* Discussion 1 – Introduce yourself
* Orientation Quiz
* HLS 10.1, 10.2, 10.3
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| Week 2Aug 25 | * HLS4: 11.1 Comparing Two Population Means, Sigma 1 and Sigma 2 Known
* HLS5: 11.2 Comparing Two Population Means, Sigma 1 and Sigma 2 Unknown
* HLS6: 11.3 Paired Difference Test
 | * HLS 11.1, 11.2, 11.3
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| Week 3Sep 1 | * HLS7: 12.1 Introduction to the Analysis of Variance
* HLS8: 12.3 The F-Distribution and the F-Test
* Review
 | * HLS 12.1, 12.3
* Quiz 1: HLS Modules 10.1, 10.2, 11.1, 11.2, 11.3, 12.1, 12.3
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| Week 4Sep 8 | Exam 1 | * Exam 1 covers chapters 10.1, 10.2, 11.1, 11.2, 11.3, 12.1, & 12.3
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| Week 5Sep 15 | * HLS 9: 10.5 Testing a Hypothesis about a Population Proportion
* HLS 10: 11.4: Comparing Two Population Proportions
* HLS 11: 16.3 The Chi-Square Test for Association
 | * HLS 10.5, 11.4, 16.3
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| Week 6Sep 22 | * HLS 12: 13.1: The Simple Linear Regression Model
* HLS 12: 13.3: Evaluating the Fit of the Linear Regression Model
 | * HLS 13.1, 13.3
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| Week 7Sep 29 | * HLS 14: 14.1 The Multiple Regression Model
* HLS 15: 14.2: Coefficient of Determination and Adjusted R^2
* HLS 16: 14.5 Models with Qualitative Independent Variables
* Review
 | * HLS 14.1, 14.2, 14.5
* Quiz 2: HLS Modules 10.5, 11.4, 16.3, 13.1, 13.3, 14.1, 14.2, and 14.5
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| Week 8Oct 6 | Exam 2 | * Exam 2 is a comprehensive exam covering all learning modules.
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**Classroom Policies & Procedures**

**INCOMPLETE GRADES**: A grade of “I” will be given only in exceptional circumstances to **passing** students, and only for circumstances occurring during the last week of regular class meetings. That is, only emergency situations such as an illness or death in your immediate family constitute exceptional circumstances (and these must be fully documented).

**Academic Misconduct**

**This course adheres to the UNT policy on academic integrity. The policy can be found at** [**http://vpaa.unt.edu/fs/resources/academic/integrity**](http://vpaa.unt.edu/fs/resources/academic/integrity)

The UNT College of Business and the ITDS Department expect their students to always behave in an ethical manner. Ethical behavior affirms the personal value and worth of the individual. Adhering to high ethical standards also reflects on our greater campus community. Moreover, professionals in information systems frequently handle confidential information on behalf of their employers and clients. Thus, employers of UNT College of Business graduates expect ethical conduct from their employees because that behavior is crucial to the success of the organization. Academic dishonesty is a major violation of ethical behavior.

Students are expected to read (https://policy.unt.edu/policy/06-003) UNT’s Student Standards of Academic Integrity which defines academic dishonesty and sets out the consequences for unethical academic behavior. Cheating and plagiarism are the most common types of academic dishonesty.

The UNT’s Student Standards of Academic Integrity policy defines cheating as: *The use of unauthorized assistance in an academic exercise, including but not limited to:*

*1. Use of any unauthorized assistance to take exams, tests, quizzes or other assessments;*

*2. Dependence upon the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems or carrying out other assignments;*

*3. Acquisition, without permission, of tests, notes or other academic materials belonging to a faculty or staff member of the University;*

*4. Dual submission of a paper or project, or re-submission of a paper or project to a different class without express permission from the instructor;*

*5. Any other act designed to give a student an unfair advantage on an academic assignment.*

The university’s policy defines plagiarism as the “*Use of another’s thoughts or words without proper attribution in any academic exercise, regardless of the student’s intent, including but not limited to:*

*1. The knowing or negligent use by paraphrase or direct quotation of the published or unpublished work of another person without full and clear acknowledgement or citation.*

*2. The knowing or negligent unacknowledged use of materials prepared by another person or by an agency engaged in selling term papers or other academic materials.*

Examples of academic dishonesty in an ITDS class include but are not limited to: copying answers from another person’s paper; using notes during an exam; copying computer code from another person’s work; having someone else complete your assignments or take tests on your behalf; stealing code printouts, using AI tools for answering questions that are expected of your response, using software, or exams; recycling assignments submitted by others in prior or current semesters as your own; and copying the words or ideas of others from books, articles, reports, presentations, etc. for use as your own thoughts without proper attribution (i.e., plagiarism). It does not matter whether you received permission from the owner of the copied work; claiming the material as your own is still academic dishonesty.

The ITDS Department believes it is very important to protect honest students from unfair competition with anyone trying to gain an advantage through academic dishonesty. Academic dishonesty is not tolerated in ITDS classes, and those who engage in such behavior are subject to sanctions as outlined in the UNT’s policy and/or the course syllabus. You are strongly encouraged to read the policy carefully so that you are aware of what constitutes academic dishonesty and the consequences of this unethical behavior.

These ethical guidelines are essential to maintain the integrity of the university, college, department, faculty and most importantly the students. Breaking the code of conduct is unfair to your peers and stealing a degree. These ethical guidelines are common to both in-campus and online courses and is especially crucial for online activities.

A few key points to remember:

1. If you can google, I can google. You are not receiving course credits for being the best Googler or web crawler (looking for answers on a website). The course credit is for mastering the content and understanding how to apply it in your career.
2. If you think you are doing something that is not right, then most probably it is not right. Ask the instructor or the tutor before proceeding with that route.
3. Do not use Artificial Intelligence of software tools to do your work. The focus of this class is for you to be able to do the work.
4. Individual activities must be completed individually, and group activities as a group.
5. Give credit to your sources (data, article etc.), cite the source and acknowledge the help you receive – it will solve much of these issues. The instructor will grade based on your contribution.
6. Remember every online activity in Canvas is monitored.

### Policies

## Attendance and Participation

Engagement in a remote/Online course is just as important as in a face-to-face class. Ongoing engagement is an important factor for student success in any Remote/Online course. There is no substitute for mastering the materials than ongoing engagement. I recommend logging in a minimum of three times a week to complete a module. Each module has an opening introduction and overview for the week.

**THREE BEFORE ME RULE**: If you have any issues or questions about assignments, class policies and schedules, etc. and want to speak with the instructor, there following is the policy. You must have attempted at least three different options before you come to me. You must tell me what you tried and the results before I will answer any questions.

### Student Support Services

* [Registrar](file:///C%3A%5CUsers%5Cjdl0126%5CAppData%5CLocal%5CTemp%5COneNote%5C16.0%5CNT%5C0%5CRegistrar) (https://registrar.unt.edu/registration)
* [Financial Aid](https://financialaid.unt.edu/) (https://financialaid.unt.edu/)
* [Student Legal Services](https://studentaffairs.unt.edu/student-legal-services) (https://studentaffairs.unt.edu/student-legal-services)
* [Career Center](https://studentaffairs.unt.edu/career-center) (https://studentaffairs.unt.edu/career-center)
* [Multicultural Center](https://edo.unt.edu/multicultural-center) (https://edo.unt.edu/multicultural-center)
* [Counseling and Testing Services](https://studentaffairs.unt.edu/counseling-and-testing-services) (https://studentaffairs.unt.edu/counseling-and-testing-services)
* [Student Affairs Care Team](https://studentaffairs.unt.edu/care) (https://studentaffairs.unt.edu/care)
* [Student Health and Wellness Center](https://studentaffairs.unt.edu/student-health-and-wellness-center) (https://studentaffairs.unt.edu/student-health-and-wellness-center)
* [Pride Alliance](https://edo.unt.edu/pridealliance) (https://edo.unt.edu/pridealliance)

### Academic Support Services

* [Academic Resource Center](https://clear.unt.edu/canvas/student-resources) (https://clear.unt.edu/canvas/student-resources)
* [Academic Success Center](https://success.unt.edu/asc) (https://success.unt.edu/asc)
* [UNT Libraries](https://library.unt.edu/) (https://library.unt.edu/)
* [Writing Lab](http://writingcenter.unt.edu/) (http://writingcenter.unt.edu/)
* [MathLab](https://math.unt.edu/mathlab) (https://math.unt.edu/mathlab)