DSCI 3710-003– Summer 2023 – 5wk2- Syllabus

CLASS (DAY/TIME/LOCATION):	Mon/ Wed – 5:30 – 9:20pm. FRLD 214
INSTRUCTOR:	**Dr. Arunachalam (Chalam) Narayanan**
OFFICE:	BLB 379J
E-MAIL:	Arunachalam.narayanan@unt.edu
OFFICE HRS:	• Monday: 4:30-5:30 pm (Frisco Campus - 450)
	• Wednesday: 4:30 – 5:30 pm (Frisco Campus-450)
	• Tuesday (zoom): 11 -noon
	or by appointment
Zoom link:	https://unt.zoom.us/my/chalamunt
Tutor hours:	Posted shortly (Zoom or main campus)

COURSE WEB SITE(S): learn.hawkeslearning.com for course material.
We also will make use of UNT's Canvas Learning Portal.

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 (Links to an external site.) (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.** (Summer 2023-5wk2)

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.**

Note: It might be cheaper to purchase the digital access to Hawkes from the UNT bookstore or off-campus bookstores (the difference will probably be a few dollars). Please check all the prices before you make your purchase.

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.). As a UNT student, you can install Microsoft Office for free through the UIT Help Desk (Links to an external site.).
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. You are expected to attend the classes regularly. I believe that 80% of studying is done by listening, the students who understand the topics while being presented– tend to do well in exams and assignments.
2. 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.
3. Students will observe and actively participate in the working of problems found in the textbook. 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.
4. The use of spreadsheets in analyzing business data will be stressed.
5. You should <u>**study**</u> 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". **Actually, work the problem by hand!**
6. 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**), 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. In fact, the assignments constitute a large portion of your grade in this course (50%). You are encouraged to keep up with the homework and meet the submission deadlines. Even if you 100% in all exams and score 0 in the assignments, the best grade possible is "F". Therefore, doing assignments is crucial.

They are simple and help you with the preparation. Students are encouraged to keep up with the homework and meet the submission deadlines.

3.   Students should not hesitate to ask questions.

3.   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 participating class should execute the drop procedure since failure to do so will result in a grade of "F" which cannot be changed.
Note the dates and exact procedures posted in **http://registrar.unt.edu/**

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 (canvas) and Quizzes cases 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 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). **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 learn.hawkeslearning.com.

Late tutorial submissions still receive partial credit, provided they are registered by **the end of day on July 26, 2023;** however, every week of delay leads to 25% penalty. 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. 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 the end 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, you can find a more detailed set of student directions that walk through the product completely.

3. **Exams:** There is one mid-term exam and a comprehensive final exam. **Each one is worth 250 points. <u>Both of these exams will be available on canvas and should be taken during the designated dates in classroom (this is an on-campus class).</u>** No make-up exams are given without an appropriate University approved excuse. 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.

    Each of the **two (50 points each) Online HLS quizzes** is a summary test of the modules completed prior to them. **<u>For these Online HLS quizzes, you get two attempts.</u>** 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 compilation of the final grades, at the end of the semester.

4. **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
HLS quizzes (2 * 50 pts)	100
Final Exam	250
TOTAL:	1,000

    Extra Credit: Each <u>HLS Tutorial that you finish on time earns you 1 extra credit points</u>. That means a student who finishes all tutorials on time will receive 16 points in addition to the 400 points for homework. These extra credit points are added to your total (so these are true extra points!)

    Canvas quizzes or in-class attendance: They are intended to provide a bonus opportunity for the students who come and attend in-class sessions. Each canvas quiz or in-class attendance is worth about 2 points and will be posted in canvas. There will be opportunity to earn up to 15 bonus points by answering those questions or attending the class sessions throughout the semester.

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

    $\geq$ 900 points (or $\geq$ 90%) $\rightarrow$ A
    $\geq$ 800 points (or $\geq$ 80%) $\rightarrow$ B
    $\geq$ 700 points (or $\geq$ 70%) $\rightarrow$ C
    $\geq$ 600 points (or $\geq$ 60%) $\rightarrow$ D
    < 600 points (or below 60%) $\rightarrow$ 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 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 (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 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) / absences.
    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 <u>only</u> 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. <u>An "I" grade cannot be used to substitute your poor performance in class.</u>**

   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 <u>substantial</u> 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.

<u>Emergency Evacuation Procedures</u>
· **Severe Weather** In the event of severe weather, all building occupants should immediately seek shelter in the designated shelter-in-place area in the building. If unable to safely move to the designated shelter-in-place area, seek shelter in a windowless interior room or hallway on the lowest floor of the building.
· **Bomb Threat/Fire** In the event of a bomb threat or fire in the building, all building occupants should immediately evacuate the building using the nearest exit. Once outside, proceed to the designated assembly area. If unable to safely move to the designated assembly area, contact on or more members of your department or unit to let them know you are safe and inform them of your whereabouts. Persons with mobility impairments who are unable to safely exit the building should move to a designated area of refuge and await assistance from emergency responders.

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 http://registrar.unt.edu

WEEK	TOPICS	HLS and Excel Assignments
Week 1 (June 26-30)		**Dates assignments are covered in class – due dates are listed in HLS**
	Course policies	
	HLS1: 10.1: Introduction to Hypothesis Testing	
	HLS2: 10.2 Testing a Hypothesis about a Population Mean Sigma Known	**Obtain authorization code, HLS** 10.1,10.2, 10.3 and 11,1 are due by 11.59 pm July 2, 2023
	HLS3: 10.3 Testing a Hypothesis about a Population Mean Sigma Unknown	
	HLS4: 11.1 Comparing Two Population Means Sigma 1 and Sigma 2 Known	

Week 2 (July 3-7) <mark>Note: We have class on July 3rd.</mark>	
HLS5: 11.2 Comparing Two Population Means Sigma 1 and Sigma 2 Unknown.	11.2, 11.3, 12.1, 12.3 are due by 11.59pm July 9, 2023
HLS6: 11.3 Paired Difference Test	
HLS7: 12.1 Introduction to Analysis of Variance (ANOVA)	
HLS8: 12.3 The F-Distribution and the F-Test	

Week 3 (July 10-14)
    Catch up and Review
    HLS Quiz 1 is due on Tue, Jul 11th.
    *** 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 ***
    First attempt in class on Jul 10th

******* EXAM 1 *******   (July 12th, 2023)
(75 minutes, Exam will be open only during class period between 6-8pm.)
During the exam time, access to HLS website and Canvas site will be restricted with only materials required for the exam and it will be through respondus lockdown browser.

Week 4 (July 17-21)

HLS9: 10.5 Testing a Hypothesis about a Population Proportion	10.5,11.4, 16.3 and 13.1 are due by 11:59pm July 23, 2023
HLS10: 11.4 Comparing Two Population Proportions	
HLS11: 16.3 The Chi-Square Test for Association	
HLS12: 13.1 The Simple Linear Regression Model	

Week 5 (July 24-28)

HLS13: 13.3 Evaluating the Fit of the Linear Regression Model	13.3,14.1, 14.2 and 14.5 are due by 11:5pm July 27,2023
HLS14: 14.1 The Multiple Regression Model	
HLS15: 14.2 The Coefficient of Determination and Adjusted R^2	
HLS16: 14.5 Models with Qualitative Independent Variables	
Catch up and Review	

<div align="center">

HLS Quiz 2 is due on Thu July 27th.
*** 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***

</div>

<div align="center">

July 28th, 2023
******* COMPREHENSIVE FINAL EXAM *******
(75 minutes, Exam will be open for 2-hour time window between 6-8pm as per UNT schedule.)
During the exam time, access to HLS website and Canvas site will be restricted with only materials required for the exam

</div>

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	10.1	Introduction to Hypothesis testing	July 2nd
2	10.2	Hyp. test for μ (Z-value)	
3	10.3	Hyp. test for μ (t-value)	
4	11.1	Comparing two means (sigma known)	
5	11.2	Comparing two means (sigma unknown)	July 9th
6	11.3	Paired difference test	
7	12.1	Introduction to ANOVA	
8	12.3	The F-Distribution and the F-test	
9	10.5	Hypothesis test for proportions	July 23rd
10	11.4	Comparing 2 proportions (large independent samples)	
11	16.3	Chi-sq. test for association	
12	13.1	Simple Linear Regression Model	
13	13.3	Fit linear model	July 27th
14	14.1	Multiple Regression	
15	14.2	The Coeff. Of determination and R^2	
16	14.5	Models with Qualitative Independent variables	

Module registration is due by (11:59pm) of due date as "logged-in" on the HLS registration system.

Late certifications are accepted for partial credits as listed in syllabus. 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 July 27, 2023.

The 2 HLS quizzes have strict deadlines and no late submissions for those.