## DSCI 2710-005, Data Description and Analysis, Fall 2018

**CLASS (DAY/TIME):** Section 005, Tuesday 7:00 – 9:50 pm, Founders 243

**INSTRUCTOR:** Fangyu Du.

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**OFFICE PHONE:** 972-338-1343

**OFFICE HOURS:** by appt

## **REQUIRED MATERIALS:**

1. **Discovering Business Statistics**, Nottingham and Hawkes **2013 ISBN 978-1-935782-87-2** 

2. *Hawkes Learning Systems: Business Statistics*, by James S. Hawkes, *Hawkes Learning Systems* (HLS), latest version. Note: This software is **required** to complete the assignments that a significant portion of your grade.

**GOALS**: At the end of the course, you should

- 1. attain an increased understanding of 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 Excel to describe and analyze numerical data,
- 4. be better able to communicate in the language of applied business statistics,
- 5. be able to manipulate simple statistical formulae to solve problems.

## **TEACHING METHOD:**

- 1. 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 observe and actively participate in the working of problems found in the textbook. In addition, students will be required to complete modules in **Hawkes Learning Systems (HLS): Business Statistics**. This process is intended to help students make more efficient use of their time in learning how to solve problems.
- 3. Students are required to participate in class discussions on statistical methodologies applied to non-trivial cases in various areas of business. The use of spreadsheets in analyzing business data will be stressed.
- 4. Students are required to complete certification assignments using the Hawkes Learning System software.

#### **EVALUATION:**

To demonstrate their ability to use quantitative techniques in business, students will complete the certification tutorials (**Hawkes Learning Systems: Business Statistics**), 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 written form. The exams and assigned work reinforce the course objectives by simulating real business problems that require students to communicate.

## **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. I encourage you to keep up with the homework and meet the submission deadlines.
- 2. This is a challenging class due to the wide range of topics covered. Please allocate time appropriate to your goals for this course. Students should not hesitate to ask questions in class. Usually someone else has the same question, so, by asking in class everyone can benefit from the question.
- 3. Regular and punctual attendance for each class is expected. Absences and tardiness are likely to cause you to miss the presentation of significant material and this may result in a lower grade. 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. In case they wish to withdraw from/ drop the course, students have the final responsibility for seeing that they properly withdraw before the scheduled last drop day. 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 ANYONE to obtain their final grade in the course. Final grades are only available electronically.

## **DSCI 3710 COURSE- SPECIFIC POLICIES:**

- 1. **Syllabus Calendar:** The syllabus is a tentative outline for the semester. Items are subject to change. Certain topics may be stressed more or less than indicated. Exam dates are generally NOT changed.
- 2. **Homework:** Homework is assigned and should be completed by recommended dates. While only the HLS tutorials (certifying modules) and Quizzes on Excel cases are graded, **you are expected to read** and understand the relevant sections of the textbook. All reading material is testable, even if it is not emphasized in the lecture.
- 3. **Excel Cases:** Projects involving the use of **Excel** to analyze business data are assigned. Excel Cases will be a team project. And the analysis findings will be present in the class by students. Extra credit will give to the group that use data visualization skills (Excel or Power BI)
- 4. **HLS Tutorial Exercises (module certifications):** Tutorial exercises using the **Hawkes Learning Systems (HLS): Business Statistics** are assigned. These form a significant part of the course grade. On completion of a module in a school 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 check that you have received credit by examining your

progress report. If there is any problem, exit HLS and then go to your course HLS Web site at http://www.hawkeslearning.com/UNTDDBS/.

No credit is awarded for any tutorial exercise completed after May/7/2018.

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 at <a href="http://www.hawkeslearning.com/webcodeform/makacode.asp">http://www.hawkeslearning.com/webcodeform/makacode.asp</a>. If you previously purchased the software and lost your code you should send an Email to HLS customer service at <a href="codes@hawkeslearning.com">codes@hawkeslearning.com</a>. 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).

- 5. **Exams:** There are 2 in-class exams worth 300 points and 1 comprehensive final exam worth 200 points. If a student misses an in-class exam (with an appropriate University approved excuse, as mentioned above) the final can be used to substitute for the missed exam (as well as for the final exam). For each exam you will be allowed to use formula sheets, notes, textbooks, any calculator, and Tables (please provide your own individual copies of these items).
- **6. Grading:** The 12 HLS modules are worth a total of 210 points (@ 17.5 points each); The Excel case are worth a total of 60 points; The two in-class exams are worth 300 points, and the comprehensive final is worth 200 points.

## **Point Allocation:**

270

Exams (2 at 150 points each)
HLS Tutorials and Excel Cases (12\*17.5 pts + 60pts)

Final Exam

TOTAL: 770

300

**Letter Grades:** 700+ = A 600+ = B

500+ = C 400+ = D Below 400 = F

## School of Business & UNIVERSITY POLICIES

- 1. If you wish to register a complaint, you should first discuss your complaint with your instructor. If this does not remedy the situation, you may contact Dr. Karen Shumway, Dean of the School of Business.
- 2. The instructor may allow a make-up exam, or the final exam could be counted twice instead of giving a make-up exam. The course grade of "I" is not given except for rare and very unusual emergencies, as per university guidelines.
- 3. University policy regarding the Code of Student's Rights, Responsibilities and Conduct is contained in **The University of North Texas at Dallas Policy Manual**. You are responsible for knowing the information contained in this and all other official University publications.

## 4. Students with Disabilities (ADA Compliance):

The University of North Texas Dallas faculty is committed to complying with the Americans with Disabilities Act (ADA). Students' with documented disabilities are responsible for informing faculty of their needs for reasonable accommodations and providing written authorized documentation. Grades assigned before an accommodation is provided will not be changed as accommodations are not retroactive. For more information, you may visit the Student Life Office, Suite 200, Building 2 or call 972-338-1777. The Disabilities Services Coordinator is Dr. Cynthia Suarez (Cynthia.suarez@untdallas.edu).

5. Dates of drop deadlines and final exams are published on the school website. Please be sure you keep informed about these dates.

#### 6. Student Evaluation of Teaching Effectiveness Policy:

The Student Evaluation of Teaching Effectiveness (SETE) is a requirement for all classes at UNTD. This short survey will be made available to you at the end of the semester, 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 the SETE to be an important part of your participation in this class.

## 7. Honor Code Statement:

You will be required to agree to the following statement on all submitted work: On my honor, I have not given, nor received, nor witnessed any unauthorized assistance that violates the UNTD Academic Integrity Policy.

## DSCI 2710 SYLLABUS—Spring 2016

The syllabus below is a tentative outline for the semester. It is meant to be a guide and several items are subject to change.

Class Days	<u>Topics</u>	Sections in Text
Aug. 28	Syllabus Statistics	page ix Chapter 1
Sep. 4	Data	Chapter 2
Sep. 11	Organizing, etc.	Chapter 3
Sep. 18	Numerical Descriptives	s Chapter 4, skip 4.6
Sep. 25	Exam #1	Chapters 1-4
Oct. 2	Probability	Chapter 5
Oct. 9	More Probability	Chapter 5, skip 5.7, use 5.8 as reference
Oct. 16	Discrete Probability	Chapter 6
Oct. 23	No Class	
Oct. 30	Continuous RVs	Chapter 7, skip 7.4
Nov. 6	Exam #2	Chapters 5-7
Nov. 13	Samples and Sampling	Dist Chapter 8
Nov. 20	Samples and Sampling	Dist Chapter 8
Dec. 4	Estimating	Chapter 9
Dec. 11	Group Project Meeting	g
Dec. 18	Final Exam	

## **DUE DATES**

## **Hawkes Learning Systems: Business Statistics**

	<u>Module</u>	<u>Title</u>
1	1.1-1.3	Getting Started
2	2.5-2.6	Levels of Measurement and Data Classifications
3	3.4	Frequency Distributions
4	3.5-3.9	Graphical Displays of Data:
5	4.1	Measures of Location
6	4.2a	Measures of Dispersion
7	5.1-5.2	Classical Probability
8	6.1-6.3	Discrete Random Variables
9	6.5	The Binomial Distribution
10	7.2	Introduction to the Normal Curve
11	7.3b	The Normal Distribution
12	8.3	The Distribution of the Sample Mean

Note: there are 12 assignments. These modules may be completed at any time <u>prior to 12/18</u> <u>midnight</u>.

## NOTE

The next several pages of the syllabus contain instructions for registering an Adventures module online. All modules must be registered online, whether you complete the module in one of the UNT computer labs or on your personal computing device. After completing a module and registering it, you check your Hawkes progress report. You should print a copy of the progress report every time you complete a module. This hard copy of the progress report can be used in case of need if the system fails/crashes. Progress reports showing completion of a module may be used if the system errs in recording a module. No assignments accepted after 5/12/16.

## **Notes on Excel Assignments:**

Excel Assignments are assessed using the Web Quiz feature of the Hawkes Learning System. You will need your excel assignment outputs, your text, and your calculator to

successfully take the assessment quiz for each assignment.

## **Taking Online Excel Quizzes**

Get into the Hawkes software as usual (as though you were going to complete one of the 10 modules). At the bottom of the page, select **Web Test**. 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 quiz.

## **Notes**

- (1) These quizzes will not open until the scheduled time 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 did complete.** Therefore, get everything you need (e.g., hard copy of the Excel spreadsheets, calculator, textbook) **BEFORE** opening the quiz.
- (2) Be sure to turn off your firewall (if you have one) before starting an Excel quiz.

## **Notes on Hawkes:**

To <u>actually run</u> the software you must purchase an access code. For those of you with a Visa or MasterCard, follow Option 1. If you don't have such a card, follow Option 2.

- Option 1: Go to <a href="http://www.hawkeslearning.com">http://www.hawkeslearning.com</a> and select **get your Access Code**. Select **Purchase an Access Code**. Follow the screen prompts. The product is named "Discovering Business Statistics."
- Option 2: Purchase the box containing this software in the UNT Bookstore or wherever this software is sold on campus. On the back of the tear-off strip attached to the front cover is a code that is necessary in Step 3 (below). Obtain your access code by following these steps:

Log on to <a href="www.hawkeslearning.com">www.hawkeslearning.com</a>, click on **get your access code**, and follow the instructions for **Register Your License Number** by entering your coupon information. You will receive your code within minutes! If there is a 15 minute delay in receiving your code, contact Hawkes Learning at 800-426-9538 and they will assist you. **Be sure to enter your name exactly as the registrar at UNT has your name (e.g., no nicknames, etc.).** 

See www.hawkeslearning.com or phone HLS at 800-426-9538 for help.

## Some Useful Hawkes Directions

## TO ENROLL IN YOUR INSTRUCTOR'S GRADEBOOK:

- If you have internet access and have entered your Course ID (which is <u>UNTDDBS</u>), 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.
- If you do not have internet access on the computer where the software is installed, you will need to enroll in your instructor's gradebook. After entering your Access Code, you will be prompted to choose your instructor's name and the correct section from the pull-down menus.

Your Hawkes Progress Report will contain:

- your points for the Hawkes modules
- your Excel quiz points
- your scores for exams

Dec 18, midnight.

# Remember: The course ID is UNTDDBS.

- Progress reports showing completion of a module may be given to your instructor if the system errs in assigning or recording credit.
- No assignments will be counted after