

DSCI 2710d-090, Data Description and Analysis, Summer 2015

CLASS (DAY/TIME): Section 090, TuTh 10:00 am – 1:50 pm, Founders (Dal2) room 338

INSTRUCTOR: Daniel D. Friesen, Ph.D.

OFFICE: Founders (Dal2) 236 **E-MAIL:** Daniel.friesen@untDallas.edu

OFFICE PHONE: 972-338-1805 **OFFICE HOURS:** MW: 1 – 6 pm;
T: 4 – 6 pm;
R: 4 – 6 pm; And by appt.

REQUIRED MATERIALS:

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

2. Adventures in Statistics, by James S. Hawkes of Hawkes Learning.

Note: This software is required to complete the assignments that comprise a substantial part of your grade. Each student must purchase an access code to use the software whether running it at home or in our lab.

OPTIONAL RESOURCES:

www.cob.unt.edu/slides/kvanli these are some alternative Powerpoint slides, also available in Hawkes.

GOALS: At the end of the course, you should

1. own an improved 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.

EVALUATION

To demonstrate your ability to use quantitative techniques in business, you will answer exam questions based on short cases. Rather than being purely numerical, problems will be presented in written language. In addition, you will work on Excel case studies that require you to use an Excel spreadsheet program to analyze and describe real-world business data. By simulating real business problems and requiring you to communicate in writing through the language of statistics, these evaluation instruments will reinforce the course objectives.

GENERAL COMMENTS:

1. Most students find that this class requires large amounts of resources to achieve success.
 - a. One of the demanding aspects of this course is the large number of new topics, coupled with the multiple ways of presenting them. There are two primary learning sources (textbook and Hawkes); however, use of additional sources—e.g. tutors, Khan videos, other textbooks, etc.—could possibly add to the level of complexity (due to alternative ways of explanation and notation) while at the same time improving understanding. Finding the optimal mix is a challenge.
 - b. The most important resource is *time*, along with the willingness to use it for this class. How much time are we talking about here? The old rule-of-thumb was 2-3 hours outside of class for every hour inside of class. If you use the 2 hour figure, you will need 16 hours per week outside of class to invest in this class for a moderate outcome (say “C” or “B” level of work). What do you do with your time? Read (text, Powerpoints, practice tests), practice your skills by working problems, work in the Hawkes tutorial program. Doing the assignments is essential to succeeding in this course. For optimal results, you should read every textbook problem. You should work as many of the textbook problems as possible. In addition to the problems in the textbook, the Adventures in Statistics modules (Hawkes) are intended to assist you in better structuring the learning time you spend on practice problems. Many of the textbook practice problems have answers in the back of the textbook. Keep up with the assignments!!
 - c. You will be able to modify the resource requirements by the level of facility in mathematics and Excel that you bring to class. If you are lacking in these skills, you will need to allocate more time, and vice-versa.
2. Regular and punctual attendance for the **full** period of each class is expected. Absences and tardiness are likely to cause you to miss significant materials; this generally results in a lower grade.
3. 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.
4. Practice problems are discussed in class. They come from the end-of-chapter / end-of-section problems. Understanding these problems is critical to learning the material well enough to complete exams within allotted time.
5. You should not hesitate to ask questions in class. Usually someone else has the same question, so, by asking in class, everyone can benefit from your question.
6. If you drop the course, you have the final responsibility for seeing that you are properly withdrawn or dropped before the scheduled last drop day. Anyone who stops attending class should execute the drop procedure since failure to do so may result in a grade of “F” which cannot be changed.
7. Course grades are available electronically in the week following final-exam week.

8. Hawkes Tutorial Exercises: Ten tutorial exercises using the Hawkes Learning modules are assigned. These are an important part of the course grade. You will **not** submit anything here since the modules must be certified **online**. Detailed information on certifying Hawkes modules is presented at the end of this syllabus and in the course web site. If you encounter difficulty with Hawkes assignments, print some screen shots for us to examine in class.
9. Excel Assignments: Four computer exercises using Excel are assigned. Output from these assignments will be used to complete on-line quizzes via Hawkes Learning System and, as such, are an important part of the course grade.
10. Exams: There will be two in-class exams plus the in-class final exam (**comprehensive**). For each exam, you will be allowed to use a calculator and a formula sheet. All exams are open book but **NOT** open notes.

Point Allocation:

Exam #1	200
Exam #2	200
Final exam (comprehensive)	200
Tutorials (Hawkes Learning) (10)	140 (14 points each)
Excel assignment quizzes (4)	<u>60</u> (15 points each)
TOTAL	800

Note: I seldom offer any extra credit in this course. There are two exceptions.

- a. There are extra Hawkes modules available for extra credit.
 - b. If you have a middle-level or high-level “D” in this course, I will likely raise that grade to a “C” if you have completed **ALL** of the required Hawkes modules and **ALL** of the Excel assignments / quizzes.
- a. Grading: Course average based on all components
90+ = A 80+ = B 70+ = C 60+ = D Below 60 = F

DIVISION & 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 UNTD 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 Office of Student Affairs website. 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, Founders Hall or call 972-338-1777. The Disabilities Coordinator is Cindy Suarez.
5. Dates of drop deadlines and final exams are published on the school website. Please be sure you stay informed about these dates.
6. **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—Summer 2015

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

<u>Class Days</u>	<u>Topics</u>	<u>Sections in Text</u>
June 9	Syllabus Statistics	page ix Chapter 1
June 11	Data Organizing, etc.	Chapter 2 Chapter 3
June 16	Numerical Descriptives Exam #1 Review	Chapter 4, skip 4.6 Chapters 1-4
June 18	Exam #1 Probability	Chapter 5, skip 5.7, use 5.8 as reference

<u>Class Days</u>	<u>Topics</u>	<u>Sections in Text</u>
June 23	Exam Debriefing Discrete Probability	Chapter 6
June 25	Continuous RVs	Chapter 7, skip 7.4
June 30	Exam #2 Review Exam #2	Chapters 5-7
July 2	Exam Debriefing Samples and Sampling Dist	Chapter 8
July 7	Estimating	Chapter 9
July 9	Final Exam Review Final Exam	

DUE DATES: Hawkes Learning Systems: Business Statistics

<u>Module</u>	<u>Module</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. **Only 10 are required.** You may complete the remaining 2 for extra credit. These modules may be completed **at any time prior to 7/9 midnight.**

Excel Assignments

- I will distribute written instructions for each assignment and discuss same. At that time, due dates will be established.
- Notes on accessing Hawkes to complete Excel Quizzes are shown below.

Optional DSCI 2710 web site

<http://www.cob.unt.edu/itds/courses/dsci2710/>

NOTE

The next part of the syllabus contains 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 at home. After completing a module and registering it, please check your Hawkes progress report. No late assignments are accepted after 7/09/14.

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 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 actually run 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 <http://www.hawkeslearning.com> 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 Dallas Bookstore. 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 www.hawkeslearning.com, 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 INSTALL THE SOFTWARE AT HOME:

1. Place CD #1 in the CD-ROM drive.
2. Double-click on the **My Computer** icon.
3. Double-click on the CD-ROM drive (has a picture of a CD-ROM disk).
4. Double-click on Setup.exe.
5. Follow the on-screen instructions.
6. You will be prompted for a **Course ID**.
-If you have internet access, select "Yes, the Course ID is:" and enter [UNTDDBS](#) in the box provided.
-If you do not have internet access, select the option that says "No, I will not be accessing an online progress report from this computer."

TO ENTER THE SOFTWARE AND SAVE YOUR ACCESS CODE:

1. Double-click on the Hawkes purple diamond icon on your Desktop (or go to Start, Programs, Hawkes Learning Systems).
2. Enter your access code when prompted. You may type it, paste it, or load it from a disk (if you saved it from e-mail) by clicking the "F1-Load From Disk" option and browsing to the path where you saved it. If you type or paste your access code, you will be prompted to save it. Save your access code to a floppy disk or another option to avoid typing it each time.

TO ENROLL IN YOUR INSTRUCTOR'S GRADEBOOK:

1. If you have internet access and have entered your Course ID (which is [UNTDDBS](#)), 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.
2. 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

Remember: The course ID is UNTDDBS.

- Progress reports showing completion of a module may be given to your instructor if the system errs in recording a module.

- **No assignments will be counted after July 9, midnight.**