

South Plains College Department of Mathematics and Engineering

Math 1442.151/451: Online Business Statistics

Fall 2019 Course Syllabus

Instructor: Jennifer K Bartlett

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Office: Levelland Campus Math 113

Office Hours: Mondays & Wednesdays 8:30 – 10:00,

Telephone: (806) 716-2664

Tuesdays & Thursdays 9:15 – 10:00,

Fridays 8:30 – 12:00, or by appointment

Prerequisites: College Algebra (Math1314), Math Analysis I (Math1324), or consent of instructor

Credit: 4 hours **Lecture:** 3 hours **Lab:** 3 hours

This course satisfies a math requirement for Business Majors and some nursing majors (BSN)

Course Description: This course is an introduction to the techniques of collection, presentation, analysis, and interpretation of numerical data. Applications of correlation methods, analysis of variance, dispersion, sampling, quality control, reliability, and mathematical models will be covered. This course may require lab time on the computer using EXCEL.

Course Objectives: The purpose of this course is to provide a transferable course in the elements of business statistics. Upon completion of this course and receiving a passing grade, the student will demonstrate mastery of the following concepts:

1. represent raw data using frequency distributions
2. represent raw data using stem & leaf plots, ogives, histograms, bar graphs, and pie charts
3. calculate measures of central tendency, variation, and position for both grouped and ungrouped data and interpret in writing the significance and meaning of the calculations
4. calculate coefficients of variation and skewness and interpret in writing the significance of the calculations
5. calculate classical and empirical probabilities
6. apply binomial, Poisson, and normal distribution properties to calculate probabilities and interpret in writing the significance of the calculations
7. calculate mean, variance, and standard deviations of probability distributions and interpret in writing the significance of test results
8. evaluate a hypothesis testing situation to determine the appropriate test to be used
9. use parametric and non-parametric tests for hypothesis testing and interpret in writing the significance of test results
10. calculate simple and multiple linear regression equations and use equations to make predictions
11. calculate coefficients of correlation, determination, and non-determination and interpret in writing the significance of the calculations
12. use a computer statistics program and/or a statistical calculator to help with computations

Course Materials:

- Textbook: *Elementary Statistics using EXCEL*, by Mario Triola, 6th Ed., published by Pearson
Book Options (All 3 options include access to the electronic version of the book)
 - 1) Purchase a new physical book that includes a pre-paid web access code.
(physical book and e-book)
 - 2) Purchase a used book, then purchase the web access code separately on www.pearson.com/mylab.
(physical book and e-book)
 - 3) Do not purchase a physical book; purchase only the web access code directly from www.pearson.com/mylab.
(no physical book; only e-book)

Note: No matter how you are going to pay for the access code, MyStatLab does allow a grace period/temporary access for about 14 days where you don't have to pay for the access. Go ahead and get registered for the course on MyStatLab under the grace period and just make sure to enter your access code before the grace period ends.

- Calculator: A graphing calculator with the statistics package is required and you are required to bring your calculator to EVERY class. TI-83, TI-83+, TI-83+TI-84+ are preferred, but many others are also acceptable. Any other graphing calculator, you will need to read your manual to determine how to make the processes work. Cell phones and similar devices may NOT be used as calculators and no sharing of calculators is allowed. If you have any questions about your calculator, check with the instructor immediately.
- Working, reliable internet access

Methods of Learning Assessment: Students will be continually assessed throughout the course via online questioning, paper work, and individual help in my office. Other methods of assessment include:

- **Websites:** There will be two websites that we will use for our course.
 - I. MyStatLab, www.pearson.com/mylab, will house all of the online homework and quizzes. Our Course ID is **bartlett22913**. You may purchase an access code directly from www.pearson.com/mylab. See MyStatLab instructions below for more info.
 - II. Blackboard is the online course management system that will be used for this course. The course syllabus as well as any other class handouts can be accessed through Blackboard. Blackboard will also house your official grade book with current average and all course notes. Students are responsible for checking the accuracy of their posted grades. Students that disagree with a grade, will need to discuss it with the professor within one week of the grade being posted on Blackboard.
Login at <http://southplainscollege.blackboard.com>. The user name and password should be the same as the MySPC and SPC email.
User name: first initial, last name, and last 4 digits of the Student ID
Password: Original Campus Connect Pin No. (found on SPC acceptance letter)
- **Make-up Policy:** The course calendar has an outline of all due dates for all homework, quizzes, and the midterm and final exams. These due dates are the absolute LAST time that the assignment must be completed by. Due to personal, computer, or other issues that might come up, I highly recommend you work AHEAD of the due dates. If you cannot get an assignment completed by the due date, for whatever reason, you will receive a grade of a 0, so please take that into consideration when doing your coursework. To be fair to ALL students, I WILL NOT BE EXTENDING ANY ONLINE ASSIGNMENTS. So in short, there are NO make-ups for assignments!
- **Communication:** I will do my best to respond within 1 business day after receiving an email Monday through Friday and will be checking emails throughout the regular business day Monday through Friday. If I do not respond within 24 hours please email again. Use your SPC email for this course, otherwise I cannot guarantee I will receive and respond to other email addresses.
- **Homework:** Homework will be assigned online through MyStatLab: www.pearson.com/mylab. Please see the MyStatLab instructions below for more information. Typically the online homework assignments are due at 11:59pm, on Fridays of every week, and allow up to 5 attempts per problem, accepting the best score of these attempts. I suggest you do these online problems as a minimum. I strongly encourage you to work more problems from the book (hard copy book or electronic version) for sufficient practice for the exams. Homework dates are subject to change so please check the online due dates often.
- **Excel Assignments:** Some assignments you will need to complete using Excel. All Excel Projects must be turned in via email, no later than 11:59pm the date that it is due. When grading these projects, neatness and presentation will count.
- **Quizzes:** Quizzes will also be assigned online through MyStatLab: www.pearson.com/mylab. Quizzes are timed, meant to take the place of Chapter tests in a regular in-person class, and are usually due on Sundays. Quizzes are also to get you comfortable with having a number of problems to work in a certain time limit, so that you are ready to take your timed proctored midterm and final exam. Quizzes are not proctored but will be TIMED. Once you start the quiz it must be completed in the time allowed. Quiz questions will come from or be closely related to the online homework.
- **Midterm & Final Exams:** There will be 2-proctored exams during the semester: a midterm and a final exam. The Midterm and Final Exam must be proctored, completed and returned to the instructor by the dates listed in the course calendar, and will be timed at 2.5 hours. A "Proctor Form" will be emailed out at the beginning of the semester so everyone can find an appropriate proctor and provide the requested information about the proctor to your instructor. All proctors MUST BE APPROVED by the instructor. Everyone must complete the "Proctor Form" and return it to me on or before Tuesday, September 10th.

Midterm Exam: must take either Thursday, October 17th from 6:00-8:30pm at Reese Campus Building 2 Room 216
or Friday, October 18th from 8:30-11:00am at Levelland Campus Math Building Room 112

Final Exam: must take either Thursday, December 5th from 6:00-8:30pm at Reese Campus Building 2 Room 216
or Friday, December 6th from 8:30-11:00am at Levelland Campus Math Building Room 112

You will need to arrange your school/life/work schedules to accommodate taking the midterm and final exams at the specified times. If you do not, you will receive a grade of a 0 for that exam.

Grading Policy:

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|-------------------|-----|
| Homework Average | 15% |
| Excel Assignments | 10% |
| Quiz Average | 15% |
| Midterm Exam | 30% |
| Final Exam | 30% |

(no extra credit is provided in this course)

Grading Scale:

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|-----------|---|
| 90-100% | A |
| 80-89% | B |
| 70-79% | C |
| 60-69% | D |
| Below 60% | F |

Grades will be posted in Blackboard.

This grading scale is provided that you can pass the midterm/final exams in our course

Other Student Resources: You are expected to keep up with the schedule set forth by the due dates of the homework assignments and the exams. Reading the book is paramount along with practicing the homework assignments and work extra problems. Homework problems are available for practice through the assigned material, through the website's study plan, and at the end of each section in the book. A personal tutor can be a great aid, but just be sure that the tutoring is NOT DOING THE WORK FOR YOU. The student needs to be able to work the problems and understand the "why" behind what the tutor does, so that they can perform on the exams. If you need help, please ASK! I will not do your work for you but I am here to help. Here are some other good resources online:

- Your instructor is your first and BEST resource for any help!!!!
- Free online math videos at www.khanacademy.org, www.patrickjmt.com, www.mathtv.com
- Free tutoring is available in M116 on the Levelland campus. The schedule and hours of operation will be posted by the door of M116 and I will also post them on Blackboard when I get them.

Disability Statement: Students with disabilities, including but not limited to physical, psychiatric, or learning disabilities, who wish to request accommodations in this class should notify the Disability Services Office early in the semester so that the appropriate arrangements may be made. In accordance with federal law, a student requesting accommodations must provide acceptable documentation of his/her disability to the Disability Services Office. For more information, call or visit the Disability Services Office at Levelland Student Health & Wellness Center 806-716-2577, Reese Center (also covers ATC) Building 8: 806-716-4675, Plainview Center Main Office: 806-716-4302 or 806-296-9611, or the Health and Wellness main number at 806-716-2529.

Religious Holy Days: In accordance with Section 51.911, Texas Education Code, South Plains College will allow a student who is absent from class for the observance of a religious holy day to take an examination or complete an assignment scheduled for that day within seven (7) calendar days after the absence. Students are required to file a written notification of absence with each instructor within the first fifteen (15) days of the semester in which the absence will occur. Forms for this purpose are available in the Student Services Office along with instructions and procedures. "Religious holy days" means a holy day observed by a religion whose place of worship is exempt from property taxation under Section 11.20, Tax Code. (copied from current South Plains College catalog)

Diversity Statement: In this class, the teacher will establish and support an environment that values and nurtures individual and group differences and encourages engagement and interaction. Understanding and respecting multiple experiences and perspectives will serve to challenge and stimulate all of us to learn about others, about the larger world and about ourselves. By promoting diversity and intellectual exchange, we will not only mirror society as it is, but also model society as it should and can be.

Non-Discrimination Statement: South Plains College does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs and activities. The following person has been designated to handle inquiries regarding the non-discrimination policies: Vice President for Student Affairs, South Plains College, 1401 College Avenue, Box 5, Levelland, TX 79336. Phone number 806-716-2360.

Campus Concealed Carry - Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in South Plains College buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and South Plains College policy, license holders may not carry a concealed handgun in restricted locations. For a list of locations, please refer to the SPC policy at: (http://www.southplainscollege.edu/human_resources/policy_procedure/hhc.php). Pursuant to PC 46.035, the open carrying of handguns is prohibited on all South Plains College campuses. Report violations to the College Police Department at 806-716-2396 or 9-1-1.

Sexual Misconduct Statement: As a faculty member, I am deeply invested in the well-being of each student I teach. I am here to assist you with your work in this course. If you come to me with other non-course-related concerns, I will do my best to help. It is important for you to know that all faculty members are mandated reporters of any incidents of sexual misconduct. That means that I cannot keep information about sexual misconduct confidential if you share that information with me. Crystal Gilster, the Director of Health & Wellness, can advise you confidentially as can any counselor in the Health & Wellness Center. They can also help you access other resources on campus and in the local community. You can reach Ms. Gilster at 806-716-2362 or email cgilster@southplainscollege.edu or go by the Health and Wellness Center for assistance. You can schedule an appointment with a counselor by calling 716-2529.

4.1.1.4 Title IX Pregnancy Accommodations Statement: If you are pregnant, or have given birth within six months, Under Title IX you have a right to reasonable accommodations to help continue your education. To activate accommodations you must submit a Title IX pregnancy accommodations request, along with specific medical documentation, to the Director of Health and Wellness. Once approved, notification will be sent to the student and instructors. It is the student's responsibility to work with the instructor to arrange accommodations. Contact Crystal Gilster, Director of Health and Wellness at 806-716-2362 or email cgilster@southplainscollege.edu for assistance.

MyStatLab Instructions:

To access MyStatLab where your online homework/quizzes are located, go to www.pearson.com/mylab. You will need the following information:

Course ID: **bartlett22913**

Student Access Code: This can be found in the MyStatLab kit inside the front cover of your new textbook or you can purchase access online with a credit card during the registration process.

Email Address

To Register and Enroll:

- 1) Go to www.pearson.com/mylab and click the Register button in the Students Area.
- 2) Follow the onscreen instructions to register and enroll. Remember, if you received the MyStatLab kit with your textbook, you do not need to purchase access online. Your student access code is included in the kit. If you did not purchase the textbook with the kit included, you will need to purchase access online using a credit card.
- 3) During the registration process, you will design a username and password. Consider using the same username and password you use for SPC. Whatever your username and password, be sure you don't forget it.
- 4) After logging in to the course for the first time, you will need to install the proper plug-ins for the graphics and videos to work on your computer. If the installation wizard does not start automatically, locate the link called "MyStatLab Installation Wizard", and follow the instructions. This will take 20 to 30 minutes.
- 5) Once all the plug-ins are installed with the Installation Wizard and you have logged into the class, click the link "How to Enter Answers Using the MathXL Player" and watch the video that follows.
- 6) Now you are ready to access your online homework. Inside the class, click "Do Homework" on the left side of the page, and begin! Also note, you can view your homework grades under the button called "Gradebook."

Other things about MyStatLab:

- 1) Assignments will close at 11:59pm the night they are due. You will be given an adequate amount of time to complete each assignment, so late homework will NOT be accepted and due date will NOT be extended for any reason. Because computer/internet problems can occur, I recommend you begin your homework assignments early!
- 2) MyStatLab has a 14 day grace period, during which you can use MyStatLab without purchasing access. This means you have plenty of time to purchase a code, for your paycheck to come in, or for financial aid to be processed and complete the assignments in MyStatLab. I will not accept not having a code as an excuse for late or incomplete homework.
- 3) The access code is good for the life of the textbook edition we are using. If you are repeating this course, you only need the class key below to add this class. You do not need to purchase a new access code. So don't forget your MyStatLab username and password the minute you complete the final this semester.
- 4) You must have Adobe Reader and Flash to use MyStatLab. For a full list of system requirements, you can search for "system requirements" through MyStatLab's help function.
- 5) MyStatLab's help function is really useful. Please make use of their "Student Support" if you have any technical questions about MyStatLab (getting into the class, completing your homework assignments, accessing your account, etc.). If you have already made use of this support and still need additional assistance, please feel free to contact me by email or come by my office during my office hours.
- 6) Most MyStatLab assignments will be due on Fridays and Sundays, but you should pay close attention to the course calendar and online due dates, which are subject to change, to make sure you complete all assignments on or before their due dates.
- 7) You may work ahead in this course, and it is recommended that you do just in case you get sick, have computer problems, or life in general happens.
- 8) You can print your assignments and start your assignments, save them, and then come back and work on them at a later time (as long as it is before the due date for an assignment).