

South Plains College

MATH 1342 – Statistical Methods

Online

Summer II 2020

Instructor: Miss S. Davis
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Monday	Tuesday	Wednesday	Thursday	Friday
<i>Office Hours schedule are posted on Blackboard</i>				

Any questions or comments should be sent using **Blackboard email** not your SPC email. SPC email will be used as a secondary communication tool.

Please check your Blackboard email daily for announcements. If I request a reply email from you, please reply promptly.

Because Blackboard is limited in its ability to handle math symbols easily, I will reply to your math questions in pdf or another form using an attachment in **SPC email**.

Response Times

I will do my best to respond to your email within the primary office hours availability zone posted on Blackboard. 24 hours = 1 business day of receipt Monday through Thursday throughout the regular business day Monday through Thursday. 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.

Messaging/Announcements: **Blackboard Email and postings will be used as our primary means of communication. SPC Email will be used as a secondary communication instrument.** Your course will be contained within Blackboard. The instructor will post general announcements in Blackboard. Blackboard messaging and postings on the course homepage in Blackboard are a primary method of communicating in this class online. **You must check Blackboard homepage on a regular basis.**

Text: A Brief Version – Elementary Statistics: A Step by Step Approach, 7th edition, Allan Bluman, McGraw Hill. (ISBN: 978-1-259-29473-0)

Supplies: **Computer access, one flash drive**, large 3-ring notebook binder, dividers, notebook paper, graph paper (available to print on blackboard), hole punch, stapler, a staple puller, pencils, erasers, a ruler, and scientific calculator (preferably a TI-83 or higher).

This will keep your coursework organized so you can easily access all your own work.

Purpose: To provide a transferable course and the mathematical background necessary for Mathematic & Engineer majors and students in the medical and physical sciences.

Prerequisites: Successful completion of MATH 1314 and strong algebraic skills.

Attendance: Attendance is monitored through video lectures. Video attendance at the designated times and effort are the most important activities for success in this course. **Records of your video attendance are maintained throughout the rest of the semester.** Excessive video absences consist of 3 cumulative videos(days). You are expected to actively participate in this class weekly by watching video lectures at their scheduled times and completing the homework assignments before each test. If you unfortunately happen to incur a video absence, please contact the instructor either by phone or email. Just logging in does not keep you compliant.

Withdrawal:

If you wish to withdraw yourself from this class for any reason, you must initiate the appropriate steps on your own.

Online Assignment Policy: Homework will be given daily. Although the homework assignments will not be graded, **the practice is required in order to more fully understand each topic and to successfully negotiate the quizzes and the tests.** Questions over the homework problems will be discussed in Zoom sessions at your appointed time.

Online Quizzes: There will be a quiz or so over various material. Most quizzes will be online through Blackboard. However, some quizzes maybe handwritten requiring you to work the problems out on paper, scan your work, and upload it to Blackboard right after you complete the quiz. If you do not have a scanner, there is a mobile app called “scannable” that you can try. I need to receive your work within 15 minutes after you submit the quiz. If I do not receive your work within this time allotted, you may receive a 0 on the quiz. If your answers are correct, but your work is not correct, you will not receive credit for those problems. Quizzes must be taken in one sitting. You will have a limited time to complete each quiz. Make sure you have uninterrupted time when taking the quiz. You will not be able to access assignments or the book in Blackboard during the quizzes. You are not allowed to use any electronic devices during quizzes except for a calculator!

Online Tests: There will be three tests. See your OUTLINE for the approximate date for each test.

- **No technologic devices such as cell phones, PDA's, etc. are to be used during tests unless the cell phone is your primary tool for Zoom sessions.**
- Tests will be proctored and monitored by through Zoom sessions. You will be allowed a calculator. You will not be allowed cell phones, smart watches, or any other electronic devices unless the cell phone is your primary tool for Zoom sessions.

Study You should normally spend approximately 3 hours outside of class in study for each hour of lecture. Try to study the assigned lesson as soon after each video is watched. Refer to the "How to Study" sheet for further detailed studying suggestions.

Methods of Learning Assessment:

- ✦ **Handwritten notes when watching videos.** This helps both of us to be diligent in keeping your skills on pace.
- ✦ **Online quizzes.** They are practice for the tests.

Notebook: Homework, quizzes, tests, and other useful material should be kept in a notebook in which the notebook will be used as a reference and study guide. The following material will be placed in the notebook in the order listed:

1. Cover sheet including Name, Class, and Semester
2. Syllabus
3. Assignment sheet
4. Notes
5. Work
6. Quizzes
7. Tests
8. Miscellaneous

Tutoring: Free tutoring is available online at Tutor.com. Access to Tutor.com can be found on your **Blackboard** page for this class.

Grading Scale:

$$\text{Average} = \frac{\text{Quiz Avg} + \text{Test 1} + \text{Test 2} + \text{Test 3}}{4}$$

A:	90 and above	D:	60 – 69
B:	80 - 89	F:	59 or below
C:	70 - 79		

Borderline Grades: These grades will be evaluated with regard to attendance and mature conduct in class.

Critical Dates:

Aug 3 Last day to drop

Student Responsibilities:

- Be aware of announcements made in Blackboard.
- Work homework problems early enough to seek help if needed.
- Form online study groups.
- **You will obtain your final grade for the class through Texan Connect.**

Questions: I invite all your questions **except** the following:

1. I wasn't able to make it to class. Did I miss anything? (Yes.)
2. Is this going to be on the test? (Perhaps, not directly, but if the ideas were not important, I would not be discussing them in class.)
3. Do you have the test graded? (I normally have the tests graded by the next class day. However, there are times that I do not have them graded but I will have them graded as soon as I can.)

Academic Integrity: The attempt of any student to present as his or her own any work which he or she has not honestly performed is regarded by the faculty and administration as a serious offense and renders the offender liable to serious consequences, possibly suspension. For more detail, see “Academic Integrity” and “Student Conduct” in the South Plains College General Catalog.

You are expected to work alone on all quizzes and tests. You are not allowed to use any electronic device other than your calculator during a quiz or test. If you choose to cheat, you will be withdrawn immediately from this class with a grade of "F."

Academic Misconduct: Complete honesty is required from students in all facets of course work including homework assignments, tests, and the final exam. See the South Plains College Catalog for more detail.

Plagiarism violations include, but are not limited to, the following:

1. Turning in paper(s) that has/have been purchased, borrowed, or downloaded from another student(s), an online term paper site, or a mail order term paper mill;
2. Cutting and pasting together information from books, articles, other papers, or online sites without providing proper documentation;
3. Using direct quotations (three or more words) from a source without showing them to be direct quotations and citing them; or
4. Missing in-text citations.

Sanctions for Cheating or Plagiarizing: A grade of “F” in the course will be assigned to any student caught cheating or plagiarizing; additional sanctions may also be considered. Students are responsible for understanding the meanings of the words cheating and plagiarizing.

Cheating violations include, but are not limited to, the following:

1. Obtaining an examination by stealing or collusion;
2. Discovering the content of an examination before it is given;
3. Using an unauthorized source of information (notes, textbook, text messaging, internet, apps) during an examination, quiz, or homework assignment;
4. Entering an office or building to obtain an unfair advantage;
5. Taking an examination for another;
6. Altering grade records;
7. Copying another’s work during an examination or on a homework assignment;
8. Rewriting another student’s work so that the writing is no longer the original student’s;
9. Taking pictures of a test, test answers, or someone else’s paper.

Course Objectives: Upon completion of this course and obtaining a passing grade, the student will have mastered at least 70% of the course objectives. The course objectives state that the student will be able to:

1. Recall from memory the meaning of the six trigonometric functions.
 - Hence, compute the values of the six trigonometric functions for key angles in all quadrants of the unit circle measured in both degrees and radian.
2. Be able to graph the six basic trigonometric functions and also variations and transformations of these functions.
3. Recall from memory numerous trigonometric, single and multi-angle identities and be able to use these identities to rearrange and manipulate trigonometric expressions.
 - Hence, prove trigonometric identities.
4. Be able to solve trigonometric equations giving the solutions both in degrees and radians.
5. Be able to solve right and oblique triangles.
6. Recall from memory the meaning of the six inverse trigonometric functions and their respective ranges.
7. Be able to find the solution the practical problems (applications) by making use of the expertise mentioned in objective 1 – 6.

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.

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 Special 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 Special Services Coordinator. For more information, call or visit the Special Services Office in the Student Services Building, 894-9611 ext. 2529.

Confidentiality: 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. Dr. Lynne Cleavinger, 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 Dr. Cleavinger at 716-2563 or lclevinger@southplainscollege.edu or go by the Health and Wellness Center. You can schedule an appointment with a counselor by calling 716-2529.

Sexual Misconduct

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. Dr. Lynne Cleavinger, 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 Dr. Cleavinger at 716-2563 or lclevinger@southplainscollege.edu or go by the Health and Wellness Center. You can schedule an appointment with a counselor by calling 716-2529.

Campus Concealed Carry: 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.

Course Outline

This schedule is tentative and subject to change. Changes will be announced in class.

Monday	Tuesday	Wednesday	Thursday
		08 - July Chapter 1 The Nature (Definitions)	09 - July 2.1 Organizing Data 2.2 Histograms, Frequency Polygons, & Ogives
13 - July 2.3 Other Types of Graphs 2.4 Paired Data & Scatter Plots	14 - July 3.1 Measures of Central Tendency 3.2 Measures of Variation	15 - July 3.3 Measures of Position 3.4 Exploratory Data Analysis	16 - July <i>10.1 Correlation</i> <i>10.2 Regression</i> <i>10.3 Coefficient of Determination & Standard Error of the Estimate</i>
20 - July 4.1 Sample Spaces & Probability 4.2 Addition Rules for Probability	21 - July 4.3 Multiplication Rules & Conditional Probability	22 - July 4.4 Counting Rules 4.5 Probability & Counting Rules	23 - July 5.1 Probability Distributions 5.2 Mean, Variance, Standard Deviation, & Expectation
27 - July <div style="text-align: center;">TEST #1 (Ch. 1, 2, 3, & 4)</div>	28 - July 5.3 Binomial Distribution	29 - July 6.1 Normal Distributions 6.2 Applications of Normal Distributions 6.3 Central Limit Theorem	30 - July 7.1 Confidence Intervals for the Mean when sigma is Known (Z-test) 7.2 Confidence Intervals for the Mean when sigma is Unknown (<i>t</i> -test)
03 - Aug LDTD 7.3 Confidence Intervals & Samples Size for Proportions	04 - Aug 8.1 Steps in Hypothesis Testing – Traditional Method 8.2 <i>z</i> – Test for a Mean	05 - Aug <div style="text-align: center;">TEST #2 (Ch. 5, 6 & 7)</div>	06 - Aug 8.3 <i>t</i> – Test for a Mean 8.4 <i>z</i> – Test for Proportion
10 - Aug 9.1 Testing the Difference Between Two Means – Using the <i>z</i> – Test 9.2 Testing the Difference Between Two Means of Independent Samples – Using the <i>t</i> – Test	11 - Aug <div style="text-align: center;"><i>Review</i></div>	12 - Aug <div style="text-align: center;">TEST #3 (Ch. 8 & 9)</div>	

MATH 1342 (3:3:0)

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MATHEMATICS DEPARTMENT

Division of Arts & Sciences

South Plains College

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Shirley Davis