

South Plains College

MATH 1342 – Statistical Methods

{ Section 004, T R 11–12:15 pm
{ Section 005, T R 2:30 – 3:45 pm

{ Math Bldg., Rm. 105
{ Math Bldg, Rm. 112 , respectively

Instructor: Miss S. Davis
Office: 103 MATH Bldg. (Levelland)
Phone: (806) 716 – 2699
E-mail address: sdavis@SouthPlainsCollege.edu

Office Hours:

Monday	Tuesday	Wednesday	Thursday	Friday
8 – 8:30a 12:45 – 1:15p 7 – 8p, Reese	9:30 – 11a 1:30 – 2:30p	10:35 – 11a	9:30 – 11a	10 – 11:30a
or by appointment				
At the times with this designation, I will be in my office to help you. You do not need an appointment to come see me at these times. When you come, I will be doing something else, but I will stop and help you. I am available at other times, but please give me a courteous call before coming to make sure I am there.				

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

Supplies: Scientific calculator preferably TI-83 or higher, graph paper, a ruler, (at least a 3 in ring) notebook, hole puncher, stapler, a staple puller, & a red pen/pencil. (Bring your supplies to class everyday!)

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 and effort are the most important activities for success in this course. Records of your attendance are maintained throughout the semester. If your lack of attendance (i.e., excessive absences) is determined by the instructor to put you at risk of failing the course, you may be dropped from the class with a F as a final grade. Excessive absences consist of 2 consecutive or cumulative days. Sleeping in class constitutes an absence. If you unfortunately happen to incur an absence, please contact the instructor either by phone or email and refer to the website to get the assignment before the next class. Please read the “Drops and Withdrawals” policies in the current South Plains College catalog.

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 at the beginning of each class meeting if time permits.

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 notebook will be brought to class everyday! 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

*To print additional material for your notebook, please visit my **Blackboard**. All printed material needs to be read at least once during the term of this course.*

Blackboard: A wealth of information is provided to you regarding to this class on **Blackboard**. Syllabus (updated), homework assignments, worksheets (supplements), videos, previous semester student evaluations, etc. Please be responsible to log in to Blackboard and visit Statistics Blackboard page and peruse through it to become familiar with all the items.

Assessments: There will be quizzes given over the assigned homework. The number of quizzes for the semester is undetermined but only a portion will count as the quiz grade.

Tests: There will be four tests (final exam inclusive). The final exam will be comprehensive. See your OUTLINE for the approximate date for each test.

Make-up Policy: There is no automatic provision for making up exams. Only under extreme circumstances (e.g., death in the family or hospitalization) will make-up exams be given, and these circumstances must be documented. If at all possible, the instructor should be notified prior to missing an exam. If you happen to miss an exam, a grade of **0** will be administered, and under the **H.E.R.** (Honest Effort Rule), this missed exam of grade **0** will not be replaced by the final exam even if the final exam is greater.

Grading Scale:

$$\text{Avg} = \frac{\text{Quiz Avg} + \text{Test 1} + \text{Test 2} + \text{Test 3} + \text{Final}}{5}$$

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.

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 the class meets as is possible. Refer to the “How to Study” sheet for further detailed studying suggestions.

Tutoring: Free tutoring is available in the Math-Engineering building (room M116). Please remember to sign in when you seek help from a tutor.

Critical Dates:

Sept 2	Labor Day	Nov 11	WEB Pre-registration for Spring 2020
Oct 11	FALL Break	Final Exam	
Nov 14	Last day to drop	Dec 10	004 (10:15 – 12:15p, Tuesday)
Nov 27 - 29	Thanksgiving	Dec 10	005 (1 – 3 p, Tuesday)

Student Responsibilities:

- Attend class, be aware of announcements made in class, and ask questions when necessary.
- Work homework problems early enough to seek help if needed.
- Form study groups.
- Read and know the attendance policy.
- ****Please, turn off cell phones and pagers during class! ****
 - If the instructor determines that activation of a cell phone, pager, PDA, or laptop interrupts the lecture or classroom discussion or impedes the progress of any student then the instructor may ask the student to leave the class temporarily or permanently.
 - **No technologic devices such as cell phones, PDA’s, etc. are to be used during tests or in-class quizzes.**
- **Do not dress for the beach.**
- **Follow the classroom policy, no food or drink allowed in the classroom if posted.**
- **In addition to the No Food or Drink classroom policy and in accordance to campus policy, no tobacco products are to be permitted and consumed in class.**
- **You will obtain your final grade for the class through TexanConnect/MySPC and MyColleague**

Cell Phone Policy: All students will, during each class period and for its duration, place and keep their cell phone, provided that they are at the present time in possession of said device, face-down in the right-hand corner and on the top surface of their desk. If a student’s cell phone activates and/or the student engages in text messaging during class at anytime during the semester, the student, by the instructor’s discretion, could be permanently dismissed from the class for the remainder of the semester. If a student’s cell is activated during class and/or the student engages in text messaging determined by the instructor, and **the student chose not to place their phone on top of their desk as mentioned above** then the student will be dismissed from the class by the instructor permanently.

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.

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

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.)

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: 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, preferably, 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.

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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 subjective to change. Changes will be announced in class.	
Week	Date	Topics and Sections Covered	
1	8/26, Tues	Introduction, Misc. Chapter 1 The Nature (Definitions)	
	8/28, Thurs	2.1 Organizing Data – (Frequency Distributions/Tables)	
2	<i>9/2, Mon</i>	<i>Labor Day</i>	
	9/3, Tues	2.2 Histograms, Frequency Polygons, & Ogives	
	9/5, Thurs	2.3 Other Types of Graphs – Bar Graphs, Pareto Charts, Time Series Graphs, Pie Graphs, Dotplot, and Stem & Leaf Plots 2.4 Paired Data & Scatter Plots	
3	9/10, Tues	3.1 Measures of Central Tendency	
	9/12, Thurs	3.2 Measures of Variation	
4	9/17, Tues	3.3 Measures of Position	
	9/19, Thurs	3.4 Exploratory Data Analysis 10.1 Correlation 10.2 Regression	
5	9/24, Tues	10.2 Regression contd. 10.3 Coefficient of Determination & Standard Error of the Estimate	
	9/26, Thurs	4.1 <i>Sample Spaces & Probability</i> 4.2 <i>Addition Rules for Probability</i>	
6	<i>10/1, Tues</i>	Test 1 (Ch 1, 2, 3, & 10)	
	10/3, Thurs	4.3 Multiplication Rules & Conditional Probability	
7	10/8, Tues	4.3 Multiplication Rules & Conditional Probability contd.	
	10/10, Thurs	4.4 Counting Rules 4.5 Probability & Counting Rules	
8	10/15, Tues	5.1 Probability Distributions 5.2 Mean, Variance, Standard Deviation, & Expectation	
	10/17, Thurs	5.3 Binomial Distribution	
9	10/22, Tues	6.1 <i>Normal Distributions</i>	
	<i>10/24, Thurs</i>	Test 2 (Ch 4 & 5)	
10	10/29, Tues	6.2 Applications of Normal Distributions	
	10/31, Thurs	6.3 Central Limit Theorem	
11	11/5, Tues	7.1 Confidence Intervals for the Mean when sigma is Known (Z-test) 7.2 Confidence Intervals for the Mean when sigma is Unknown (T-test)	
	11/7, Thurs	7.3 Confidence Intervals & Sample Size for Proportions	
12	11/12, Tues	8.1 <i>Steps in Hypothesis Testing – Traditional Method</i>	
	<i>11/14, Thurs</i>	Test 3 (Ch 6 & 7)	
13	11/19, Tues	8.2 z -Test for a Mean	
	11/21, Thurs	8.3 t -Test for a Mean	
14	11/26, Tues	8.4 z -Test for Proportion	
	<i>11/28, Thurs</i>	<i>Thanksgiving</i>	
15	12/3, Tues	9.1 Testing the Difference Between Two Means – Using the z -Test	
	12/5, Thurs	9.2 Testing the Difference Between Two Means of Independent Samples – Using the t -Test <i>Review for FINAL</i>	
Final(s)	12/10	Section 004	Tuesday, 10:15 – 12:15p
	12/10	Section 005	Tuesday, 1 – 3p

MATH 1342 (3:3:0)

Statistical Methods

MATHEMATICS DEPARTMENT

Division of Arts & Sciences

South Plains College

Fall 2019

Shirley Davis