Math 0342/1342.C602 Statistics (Corequisite)
Monday and Wednesday 7pm – 8:15 pm
Spring 2024 Room – B033

Instructor: Ms. Rachel Fleenor
Email: rfleenor@southplainscollege.edu
Office: M102
Office Phone: 806-716-4321

Office Hours: MTWR – 2:45 pm – 3:45 pm
MW – 6:00pm – 7:00pm (LBK B001)
T – 7:00 pm - 8:00 pm (LBK B001)
F – 10:00 am – 11:00 am
(or by appointment)

Course Structure
- Hybrid Course
  - On Monday and Wednesday we will meet in class from 7 – 8:15 pm
  - Tuesdays and Thursdays you will be assigned lecture videos to watch
  - Homework will consist of questions from textbook
  - All exams will be done in class
  - All students are expected to be physically in class during in-class time.

Textbook
- We are using the book: Elementary Statistics: A step by step approach by Allan G. Bluman which is available online as a free pdf.

Course Requirements/Materials
- Attend all classes ready to take notes and with homework done in advance. This will include notes over video lectures watched on off days.
- All graded assessments assigned in class are expected to be completed in the allotted class time, unless otherwise instructed by the instructor.
- Solid work ethic and character.
- Binder for notes and homework
- Pencils
- Colored Pencils/Pens
- Graphing Paper

Grading Policy (1342):
Homework (100 points – 4 each)
Exams (300 points – 75 each)
Final Exam (100 points)
500 points total

Grading Scale (1342):
450-500 points A
400-449 points B
350-399 points C
300-349 points D
<   300 points F

The MATH 0342 final grade is at the discretion of the instructor and is only a Pass/Fail grade.

***Note: Students must justify answers or show work on all problems to receive full credit.

Class Notes
- Should be completed by each student during class or while you watch the lecture video
- Bring all notes to class each day

Lecture Videos
- Found on Blackboard under Course Content.
- Watch and fill in the notes, pausing often to allow for cognitive processing time.
- Organize any questions to bring to class the next day.

Homework
- All homework is to be turned in __in-class__ the day it is due
- **NO LATE WORK** will be accepted, if you hand me a homework after its due date, I will hand it back to you
- Using PhotoMath (or similar) is strictly prohibited and will result in academic dishonestly reports being submitted to your permanent record
- Using ChatGPT or any other artificial intelligence on any assignment in this class is strictly prohibited.

Tests
- 4 midterm exams and 1 required final exam
- ONE 3 by 5 inch notecard will be allowed on each exam
- Complete in the allotted class time
- No exam grades will be dropped
- It is in your best interest to save ALL graded documents until your final grade is assigned at the end of the term
- Once you begin your exam, you will not be allowed to leave the classroom. If you do leave the classroom after the exam begins, your exam will be collected and graded as is

Final Exam
- The 1342 final exam is comprehensive
- Any student who does not take the final exams will fail the classes with F's regardless of the student's average.
- No make-up final exams will be offered.
- The Math 1342 final exam will be held on **Wednesday, May 8th** from **7:15pm to 9:15pm.**
- More details will be shared on Blackboard near the end of the term

Late work
- Exams cannot be taken early or late. You must take exams in the classroom at the assigned testing time

Make-up
- Make-up work is given at the discretion of the instructor
- NO make-up assignments are given without prior notification AND proper documentation for the absence
- If you are absent from class, have given prior notification and proper documentation of your absence, you MUST make arrangements to take the quiz or exam BEFORE the class period in which the exam will be given

Attendance Policy
- Students are expected to attend **at least** eighty percent (80%) of the total class meetings (24 classes) **and** submit **at least** eighty percent (80%) of the **total** class assignments to have the best chance of success
- If the student fails to meet these minimum requirements, the instructor may remove the student from the class with an X, upon their discretion
- Unless given specific permission, students are expected to be in the class room and on time for class each class day
- Attendance will be taken 5 minutes into each class

Academic Integrity
- Any student involved in cheating will receive a zero on the assignment(s) and will be informed of why he/she received a zero.
- Student may be administratively dropped from the class and will receive an X or F.

Calculators
- This course is taught under the assumption that each student owns a graphing calculator.
- I recommend a TI-84 series calculator.
- TI-Nspires are NOT recommended unless you are an expert at using them, as the instructor will be of little help.
- Calculators on cell phones or other electronic devices or apps will NOT be allowed during tests or in-class assignments.

Class Rules:
- Be on time and ready to learn.
- Students are **not** permitted to use electronic devices in class.
- During testing, all electronic should be placed on SILENT or turned off and put in bag
- All bags and electronics must be placed at the front or back of the classroom before you will allowed to start an exam
- Adhere to the requirements of the Student Code of Conduct.

Email Policy: All students at South Plains College are assigned a standardized SPC e-mail account. Although personal email addresses will continue to be collected, the assigned SPC e-mail account will be used as the official channel of communication for South Plains College. The Student Correspondence Policy can be found at www.southplainscollege.edu. To access the SPC student e-mail account, log in to portal.office.com. (Copied from SPC Student Guide) Since all students have an assigned SPC email, the instructor will only acknowledge, respond, and send emails to your assigned SPC email. This ensures all correspondence from the instructor is received by the intended recipient.

Blackboard: Blackboard is the online course management system that will be utilized for this course. This course is supplemented online, so all access to course information and your instructor is through the Internet. This course syllabus, as well as <u>all</u> course materials can be accessed through Blackboard. Login at https://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 CampusConnect Pin No. (found on SPC acceptance letter)

Questions regarding Blackboard support may be emailed to blackboard@southplainscollege.edu or by telephone to 806-716-2180.

SPC Tutors
Tutoring is FREE for all currently enrolled students. Make an appointment or drop-in for help at any SPC location or online! Visit the link below to learn more about how to book an appointment, view the tutoring schedule, and view tutoring locations.
http://www.southplainscollege.edu/exploreprograms/artsandsciences/teacheredtutoring.php

Tutor.com
You also have 180 FREE minutes of tutoring with Tutor.com each week, and your hours reset every Monday morning. Log into Blackboard, click on the tools option from the left-hand menu bar. Click on the Tutor.com link and you will automatically be logged in for free tutoring. You may access tutor.com tutors during the following times:
> Monday – Thursday: 8pm-8am
> 6pm Friday – 8am Monday morning

For questions regarding tutoring, please email tutoring@southplainscollege.edu or call 806-716-2538.

COVID Response: South Plains College policies, return to campus plan, and protocols regarding COVID-19 can be found here: COVID Response (southplainscollege.edu)

You can find all topics covered and the order they will be covered in below in the course calendar. All homeworks will be due on class days and are to be turned in at the beginning of class. I would HIGHLY recommend printing out this Syllabus so that you can refer back to it to see due dates and expectations.

South Plains College
Common Course Syllabus: MATH 0342/1342 Corequisite
Revised July 2023

Department: Mathematics, Engineering, and Computer Science

Discipline: Mathematics

Course Number: MATH 0342/1342

Course Title: Statistical Methods

Available Formats: conventional, hybrid

Campuses: Levelland, Downtown Center

Course Description for Math0342: Math0342 is to be taken concurrently with MATH 1342. Background topics which are necessary for a student to successfully complete MATH 1342 will be covered, with an emphasis on integers, percentages, graphing, fractions, and exponents.

Course Description for Math1342: Collection, analysis, presentation and interpretation of data, and probability. Analysis includes descriptive statistics, correlation and regression, confidence intervals and hypothesis testing.

Prerequisite: Minimum score of 350 on the TSIA1, minimum score of 950 on the TSIA2, a diagnostic score of 6 on the TSIA2, TSI-exempt status, a successful completion with a grade of 'C' or better in MATH 0337, or successful completion of NCBM-0112.

Credit: 6 **Lecture:** 6 **Lab:** 0

Textbook: *Elementary Statistics: Picturing the World*, Larson and Farber, 2019, 7th Edition, Pearson.

FOR THIS SECTION: WE WILL BE USING A NO COST TEXT:

Elementary Statistics: A step by step approach by Allan G. Bluman

Supplies: Please see the instructor's course information sheet for specific supplies.

This course partially satisfies a Core Curriculum Requirement: Mathematics Foundational Component Area (020)

Core Curriculum Objectives addressed:
- **Communications skills**—to include effective written, oral and visual communication
- **Critical thinking skills**—to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
- **Empirical and quantitative competency skills**—to manipulate and analyze numerical data or observable facts resulting in informed conclusions

Student Learning Outcomes: Upon completion of this course and receiving a passing grade, the student will be able to:
1. Explain the use of data collection and statistics as tools to reach reasonable conclusions.
2. Recognize, examine and interpret the basic principles of describing and presenting data.

3. Compute and interpret empirical and theoretical probabilities using the rules of probabilities and combinatorics.
4. Explain the role of probability in statistics.
5. Examine, analyze and compare various sampling distributions for both discrete and continuous random variables.
6. Describe and compute confidence intervals.
7. Solve linear regression and correlation problems.
8. Perform hypothesis testing using statistical methods.

Student Learning Outcomes Assessment: A pre- and post-test questions will be used to determine the extent of improvement that the students have gained during the semester

Course Evaluation: There will be departmental final exam questions given by all instructors.

Attendance/Student Engagement Policy: Attendance and engagement are the most critical activities for success in this course. The instructor maintains records of the student's attendance and submission of assignments throughout the semester. The student is expected to attend at least eighty percent (80%) of the **total** class meetings **and** submit at least eighty percent (80%) of the **total** class assignments to have the best chance of success. If the student fails to meet these minimum requirements, the instructor may remove the student from the class with an X, upon their discretion, to help the student from harming their GPA. If the student can not receive an X, the instructor will assign an F.

Plagiarism violations include, but are not limited to, the following:
1. Turning in a paper that has been purchased, borrowed, or downloaded from another student, 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.

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 in Peer Editing so that the writing is no longer the original student's;
9. Taking pictures of a test, test answers, or someone else's paper.

Student Code of Conduct Policy: Any successful learning experience requires mutual respect from the student and the instructor. Neither the instructor nor the student should be subject to others' rude, disruptive, intimidating, aggressive, or demeaning behavior. Student conduct that disrupts the learning process or is deemed disrespectful or threatening shall not be tolerated and may lead to disciplinary action and/or removal from class.
For information regarding official South Plains College statements about intellectual exchange, disabilities, non-discrimination, Title IX Pregnancy Accommodations, CARE Team, and Campus Concealed Carry, please visit https://www.southplainscollege.edu/syllabusstatements/.
South Plains College policies, return to campus plan, and protocols regarding COVID-19 can be found here: https://www.southplainscollege.edu/emergency/covid19-faq.php.

SPC Bookstore Price Match Guarantee Policy: If you find a lower price on a textbook, the South Plains College bookstore will match that price. The difference will be given to the student on a bookstore gift certificate! The gift certificate can be spent on anything in the store.

If students have already purchased textbooks and then find a better price later, the South Plains College bookstore will price match through the first week of the semester.   The student must have a copy of the receipt and the book has to be in stock at the competition at the time of the price match.

The South Plains College bookstore will happily price match BN.com & books on Amazon noted as *ships from and sold by Amazon.com*. Online marketplaces such as *Other Sellers* on Amazon, Amazon's Warehouse Deals, *fulfilled by* Amazon, BN.com Marketplace, and peer-to-peer pricing are not eligible. They will price match the exact textbook, in the same edition and format, including all accompanying materials, like workbooks and CDs.

A textbook is only eligible for price match if it is in stock on a competitor's website at time of the price match request. Additional membership discounts and offers cannot be applied to the student's refund.

Price matching is only available on in-store purchases.   Digital books, access codes sold via publisher sites, rentals and special orders are not eligible. Only one price match per title per customer is allowed.

Note: The instructor reserves the right to modify the course syllabus and policies, as well as notify students of any changes, at any point during the semester.

			Tentative Calendar for Math 0314/1314 Fall 2024		
Week	**Day**	**Date**	**Topic**	**Homework Assigned**	**Homework Due**
1	Monday	Jan. 15	**Martin Luther King Jr. Day**		
	Tuesday	Jan. 16	**NONE**		
	Wednesday	**Jan. 17**	**Syllabus and Introductions Real Numbers Introduction to Statistics Part 1**	**NONE**	**NONE**
	Thursday	Jan. 18	Exponents and Order of Operations Introduction to Statistics Part 2	**HW P1 HW 1**	**NONE**
2	**Monday**	**Jan. 22**	**Fractions Data Classifications**	**HW P2 HW 2**	**NONE**
	Tuesday	Jan. 23	Place Value/Rounding Experimental Designs Part 1	NONE	**NONE**
	Wednesday	**Jan. 24**	**Converting Numbers Experimental Designs Part 2**	**HW P3 HW 3**	**HW P1 HW 1**
	Thursday	Jan. 25	Frequency Distributions and their graphs Part 1	NONE	**NONE**
3	**Monday**	**Jan. 29**	**Frequency Distributions and their graphs Part 2**	**HW 4**	**HW P2 HW 2**
	Tuesday	Jan. 30	Measures of Central Tendency	HW 5	NONE
	Wednesday	**Jan. 31**	**Fractions and Least Common Multiple Graphs and Displays Part 1**	**HW P4 NONE**	**HW P3 HW 3**
	Thursday	Feb. 1	Graphs and Displays Part 2	HW 6	NONE
4	**Monday**	**Feb. 5**	**Measures of Variation Part 1**	**NONE**	**HW 4 HW 5**
	Tuesday	Feb. 6	Measures of Variation Part 2	HW 7	NONE
	Wednesday	**Feb. 7**	**Measures of Position Part 1**	**NONE**	**HW P4 HW 6**
	Thursday	Feb. 8	Measures of Position Part 2	HW 8	NONE
5	**Monday**	**Feb. 12**	**Exam 1 Review**		**HW 7**
	Tuesday	Feb. 13	**NONE**		
	Wednesday	**Feb. 14**	**Exam 1**		**HW 8 Exam 1 Review**
	Thursday	Feb. 15	**NONE**		

6	**Monday**	**Feb. 19**	**Introduction to Probability Part 1**	**NONE**	**NONE**
	Tuesday	Feb. 20	Introduction to Probability Part 2	HW 9	NONE
	Wednesday	**Feb. 21**	**Conditional Probability and Multiplication Rule Part 1**	**NONE**	**NONE**
	Thursday	Feb. 22	Conditional Probability and Multiplication Rule Part 2	HW 10	NONE
7	**Monday**	**Feb. 26**	**Operations with Fractions Probability Distributions Part 1**	**NONE**	**HW 9**
	Tuesday	Feb. 27	Probability Distributions Part 2	HW 11	NONE
	Wednesday	**Feb. 28**	**Converting Numbers Binomial Distributions Part 1**	**HW P5 NONE**	**HW 10**
	Thursday	Feb. 29	Binomial Distributions Part 2	HW 12	NONE
8	**Monday**	**Mar. 4**	**Geometric Distributions Exam 2 Review**	**HW 13**	**HW 11**
	Tuesday	Mar. 5	**NONE**		
	Wednesday	**Mar. 6**	**Exam 2**		**HW P5 HW 12 HW 13 Exam 2 Review**
	Thursday	Mar. 7	**NONE**		
9	**March 11 - 15**		**SPRING BREAK**		
10	**Monday**	**Mar. 18**	**Normal Distributions**	**HW 14**	**NONE**
	Tuesday	Mar. 19	Standard Normal Distributions	HW 15	NONE
	Wednesday	**Mar. 20**	**Probability using Normal Distributions**	**HW 16**	**NONE**
	Thursday	Mar. 21	Finding Values using Normal Distributions	HW 17	NONE

11	**Monday**	**Mar. 25**	**Sampling Distributions and Central Limit Theorem Part 1**	**NONE**	**HW 14 HW 15**
	Tuesday	Mar. 26	Sampling Distributions and Central Limit Theorem Part 2	HW 18	NONE
	Wednesday	**Mar. 27**	**Linear Inequalities Confidence Intervals for the Mean (SD known) Part 1**	**HW P6 NONE**	**HW 16 HW 17**
	Thursday	Mar. 28	Confidence Intervals for the Mean (SD known) Part 2	HW 19	NONE
12	**Monday**	**Apr. 1**	**Confidence Intervals for the Mean (SD unknown)**	**HW 20**	**HW 18**
	Tuesday	Apr. 2	Confidence Intervals for Population Proportions	HW 21	NONE
	Wednesday	**Apr. 3**	**Exam 3 Review**		**HW P6 HW 19**
	Thursday	Apr. 4	**NONE**		
12	**Monday**	**Apr. 8**	**Exam 3**		**HW 20 HW 21 Exam 3 Review**
	Tuesday	Apr. 9	**NONE**		
	Wednesday	**Apr. 10**	**Hypothesis Testing Part 1**	**NONE**	**NONE**
	Thursday	Apr. 11	Hypothesis Testing Part 2	HW 22	NONE
14	**Monday**	**Apr. 15**	**Hypothesis Testing for Mean (SD known)**	**HW 23**	**NONE**
	Tuesday	Apr. 16	Hypothesis Testing for the Mean (SD unknown) Part 1	NONE	NONE
	Wednesday	**Apr. 17**	**Hypothesis Testing for the Mean (SD unknown) Part 2**	**HW 24**	**HW 22**
	Thursday	Apr. 18	Rectangular Coordinate System Hypothesis Testing for Population Proportion	HW 25	NONE
15	**Monday**	**Apr. 22**	**Hypothesis Testing with Two Samples (SD known)**	**HW 26**	**HW 23**
	Tuesday	Apr. 23	Hypothesis Testing with Two Samples (SD unknown) Slope and Linear Functions	HW 27 HW P7	NONE
	Wednesday	**Apr. 24**	**Correlation**	**HW 28**	**HW 24 HW 25**
	Thursday	Apr. 25	Linear Regression	HW 29	NONE

16	**Monday**	**Apr. 29**	**Exam 4 Review**	**HW 26** **HW 27** **HW P7**
	Tuesday	Apr. 30	**NONE**	
	Wednesday	**May 1**	**Exam 4**	**HW 28** **HW 29** **Exam 4** **Review**
	Thursday	May 2	**NONE**	
17	**Monday**	**May 6**	**Final Exam Review**	**NONE**
	Tuesday	May 7	**NONE**	
	Wednesday	**May 8**	**Final Exam Review**	**NONE**
	Thursday	May 9	**NONE**	
Final Exam			**Wednesday, May 8th : 7:15 pm – 9:15 pm : B033**	**Final Exam Review**

April 25th – LAST DAY TO DROP