

Math 1342.605 Syllabus
Statistical Methods
Tuesdays and Thursdays 5:30pm – 6:45pm
Rm B031 Downtown Lubbock Center
Fall 2024

Instructor: Mrs. Morgan Groves
Email: mgroves@southplainscollege.edu
Office: B017
Office Phone: 806-716-2735

Office Hours: MW 1pm – 2:30pm
 Tue/Thur 4pm – 5pm
 F 9am – 12pm
 (or by appointment)

Course Structure

- Live in-person lectures with video support online
 - Daily lectures will be done in class with the notes outline provided on Blackboard.
 - Students are to print the notes **before** coming to class.
 - Assessments, such as quizzes and exams, will all be done in class.
 - All students are expected to be physically in class unless given explicit permission to be virtual.
- Any notes written in class will be saved to OneNote, which has a link in the Course Resources folder on Blackboard.

Textbook

- No book for this section.

Course Requirements/Materials

- Attend all classes with notes and homework done.
- All graded assessments assigned in class are expected to be completed in the allotted class time, unless otherwise instructed by the professor.
- Reliable internet access
- Printer (for notes), but notes can be done electronically (tablet/iPad) if they are written by hand.
- Smart phone and/or scanner to turn a written document into a PDF file.
- Solid work ethic and character.

Grading:	Daily	5%	Grading Scale:	A 90-100
	Homework	15%		B 80-89
	Tests (3 total)	60%		C 70-79
	Final Exam	20%		D 60-69
			F 59 or below	

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

Communication

- Students are expected to check their SPC emails at least once per day.
- The instructor promises to respond to student emails within 48 hours, with the exception of weekends.
- The instructor does not check/respond to emails after 5pm on Fridays and not at all on Saturdays and Sundays. Any emails sent past 5pm on a Friday will be responded to on Monday.

Class Notes

- Found on Blackboard under Course Content.
- Should be completed by each student (hand-written) in class during the daily lectures.
- Bring all notes to class each day (2-3 inch binder recommended)
- In the event that a section of notes was not completed during class, the instructor may assign those notes to be completed using the lecture videos found on Blackboard.
 - Upload completed notes to Gradescope by the instructed due date for a **daily grade**.
- Some sections of material are declared “online” (see calendar). These will count as daily grades as well, where students upload the completed notes to Gradescope after watching the lecture videos online and completing the notes.
 - It is the student's responsibility to keep up with due dates/times.

Lecture Videos

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

Daily Grade

- In the event that students must finish the class notes using the lecture videos on Blackboard, students will be required to submit the completed notes to Gradescope for a daily grade.
- Depending on how many daily grades there are by the end of the term, up to 3 daily grades may be dropped.
- Some sections of material are declared “online” (see calendar). These will count as daily grades as well, where students upload the completed notes to Gradescope after watching the lecture videos online and completing the notes.
 - It is the student's responsibility to keep up with due dates/times.

Homework

- All homework assignments will be on MyOpenMath, a free online homework system, that is accessed through Blackboard.
- Homework is to be completed by the due dates posted on each assignment.
- No late work will be accepted.
- Written work from homework assignments should be done and kept for studying purposes but is not submitted to the instructor.
- All work in this class must be your own!!
- Up to three low homework grades will be dropped at the end of the semester.
- Using PhotoMath/AI/Statical solving software (or similar) is strictly prohibited and will result in academic dishonesty reports being submitted to your permanent record.

Tests

- 3 midterm exams and 1 final exam
- A 3x5 hand-written notecard can be used on the exams. Double-sided is okay.
- 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.
- Exams may be comprehensive.
- No make-up exams will be given.
 - In the event you miss a test, your final exam grade can replace up to one missed test grade.
- Test corrections are for your own benefit and will not be graded.

Final Exam

- The final exam is comprehensive.
- Any student who does not take the final exam will fail the classes with F's regardless of the student's average.
- No make-up final exam will be offered.
- A 3"x5" hand-written notecard is allowed, but you will not be getting it back after the exam.
- More details will be shared on Blackboard near the end of the term.

Late work

- Definition: work that was assigned but not turned in on time.
 - Ex: notes were to be completed using the lecture videos and uploaded to Gradescope, but student did not upload the notes by the due date.
- Late work is not accepted.
- If you do not turn in an assignment on time, you will receive a zero.

Make-up

- Definition: work that is done by students after the class has already completed the assignment.
 - Ex: Student misses a quiz in class because they were late or absent from class.
- Make-up work is given at the discretion of the instructor.
- NO make-up labs or tests are given without prior notification AND proper documentation.
- If you are absent from class on an exam day, have given prior notification and proper documentation of your absence, you MUST plan to take the exam BEFORE the next class period or the end of the week, whichever occurs first.
- If proper documentation and/or prior notification was not provided for your absence, and/or if you have not planned (prior to the missed class) with the professor to take the missed assignment, then you will receive a 0 for that assignment.
 - Some number of grades might be dropped at the end of the term depending on how many grades in each category there are by the end of the term.
 - No test grades are dropped.
- Any make-up assignments that are permitted by the professor must be done within 24 hours of the missed assignment.

Attendance Policy

- No more than 6 classes can be missed.
 - Students may be administratively dropped from the class for missing over 6 classes for *any* reason.
- Students must not miss too many assignments! Missing more than 20% of the assignments in the term can result in an administrative drop from the course.
- Unless given specific permission, students are expected to be in the classroom and on time for class each class day.
- There are no excused absences, even with a doctor's note.
- Tardy
 - More than 10 minutes late
 - Leaving early
- Any student who arrives more than 45 minutes late or leaves more than 45 minutes early without instructor permission will be counted absent that day.
- Any student who falls asleep during class or who leaves class for an extended period of time, as determined by the instructor, will be counted "tardy" that day.
- **Every 3 tardies count as 1 absence.**
- Transportation issues? Call an Uber, get a bus pass (Route 5 drops off just one block from the Downtown Center campus – Broadway and Ave Q – and starts at 7:50am and runs until 8:45pm), call a taxi (West Texas Cab Company (806) 559-9900), or ask a friend for a ride.

Submitting Documents Online (Gradescope)

- Download the Gradescope app onto your smart phone.
 - Log-in with your SPC credentials, just like you log into Blackboard.

In the event of “life” preventing you from attending class:

1. Email the professor ASAP to inform her of your situation. Provide documentation, if applicable.
2. Plan to attend class virtually via Blackboard Collaborate (permission required).
 - This will count for your attendance that day.
3. If you are absent or a virtual student on a quiz/test day, plan with the professor via email BEFORE class to take the quiz/test when you return. If that is unreasonable (i.e. you expect a long absence), then a virtual quiz/test might be possible with enough advanced notice for the professor.
 - Virtual quizzing/testing is allowed at the discretion of the professor.
4. If students are not able to attend class virtually and/or are not granted permission to be a virtual student that day, then that missed class will count as an absence regardless of the reason.
5. Students are expected to make every effort to attend class each day.

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

- You must have a graphing calculator.
- I recommend a TI 83 or 84 series calculator.
- TI-Nspires are NOT recommended unless you are an expert at using them, as the instructor will be of little help.

Class Rules:

- Be on time and ready to learn.
- Use only pencil for all assignments.
- Have the notes completed **prior** to coming to class.
- Students are not permitted to use electronic devices, other than a calculator, in class. **Put the cell phones away!!**
- During testing, all cell phones should be placed on SILENT or turned off, and all smart watches need to be removed and placed on the floor face-down to the left of your seat.
- Any student who leaves the classroom for any reason (bathroom, phone call, etc.) during an exam will not be allowed to continue the exam upon their return. Once you leave the classroom during an exam, you are done.
- Adhere to the requirements of the Student Code of Conduct.
- ***If you are joining the class through virtual means, please keep your microphone on mute until you have a question.***

Virtual Students

- Stay active and attentive during the entire class.
- Camera on and positioned in such a way as to allow the camera to catch both your face and your workspace.
- Keep your camera on until you have explicit permission from your instructor to turn it off.
- Students are expected to follow the same testing/quizzes/lab rules as any student in class.
- If you leave the view of the camera during an assessment without explicit permission from the instructor, you will be given a 0 on the assessment.
- Keep chat windows open during assessments as a way for the instructor to communicate (quietly) with you.

- If the student does not keep their chat window visible to themselves during assessments and misses a message from the instructor, 15% credit may be deducted from that assignment's score.
- If you break any of the rules listed above, you will receive a 0 on the assessment.
- Students who are virtual for an assessment have been given explicit permission by the instructor to take the assessment in this format. If you are not given this permission, you are expected to be in class for each and every assessment (labs, quizzes, tests). Instructor permission is not given lightly nor liberally and the decision to allow a student to work virtually is entirely at the instructor's discretion.

**South Plains College
Common Course Syllabus: MATH 1342**

Department: Mathematics, Engineering, and Computer Science

Discipline: Mathematics

Course Number: MATH 1342

Course Title: Statistical Methods

Available Formats: conventional/flex and internet

Campuses: Levelland, Reese, Plainview, Lubbock Center and Dual Credit

Course Description: 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 TSIA, TSI-exempt status, or a successful completion with a grade of 'C' or better in MATH 0337.

Credit: 3 **Lecture:** 3 **Lab:** 0

Textbook: *Elementary Statistics: Picturing the World 8/e*, Farber, Betsy | Larson, Ron. Pearson.

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 Policy: Attendance and effort are the most important activities for success in this course. The instructor maintains records of the student's engagement throughout the semester. The student will be allowed to miss twenty percent (20%) of class assignments for the semester, **for any reason**. Should this number be exceeded, the instructor has the right to drop the student with a grade of F or an X, depending on the instructor's discretion.

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.

COVID Syllabus Statement: Should be provided by the Vice-President of Student Services over email.

Student Code of Conduct Policy: Any successful learning experience requires mutual respect on the part of the student and the instructor. Neither instructor nor student should be subject to others' behavior that is rude, disruptive, intimidating, aggressive, or demeaning. 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.

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 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 Office) 806-716-2577, Reese Center (Building 8) 806-716-4675, or Plainview Center (Main Office) 806-716-4302 or 806-296-9611.

Nondiscrimination Policy: 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.

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 the Director of Health and Wellness at 806-716-2362 or [email cqilster@southplainscollege.edu](mailto:cqilster@southplainscollege.edu) for assistance.

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 and Frequently Asked Questions, please refer to the Campus Carry page at: <http://www.southplainscollege.edu/campuscarry.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.

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 1342 – Fall 2024				
Week	Day	Date	Topic	Homework
1	Tuesday	Aug 27	Syllabus and Introduction 1.1: An Overview of Statistics	1.1
	Thursday	Aug 29	1.2: Data Collection and Experimental Design	1.2
2	Tuesday	Sept 3	1.3: Frequency Distributions and Their Graphs 1.4: Measures of Central Tendency (online)	1.3 – 1.4
	Thursday	Sept 5	1.5: Measures of Variation	1.5
3	Tuesday	Sept 10	1.6: Measures of Position 1.7: Basic Concepts of Probability and Counting (online)	1.6 – 1.7
	Thursday	Sept 12	1.8: Conditional Probability and the Multiplication Rule	1.8
4	Tuesday	Sept 17	1.9: The Addition Rule	1.9
	Thursday	Sept 19	1.10: Additional Topics in Probability and Counting	1.10
5	Tuesday	Sept 24	Review	
	Thursday	Sept 26	Exam 1	Unit 1
6	Tuesday	Oct 1	2.1: Probability Distributions 2.2: Binomial Distributions (online)	2.1 – 2.2
	Thursday	Oct 3	2.3: Intro to Normal Distributions and Standard Normal Distributions 2.4: Normal Distribution (Finding Values) (online)	2.3 – 2.4
7	Tuesday	Oct 8	2.5: Sampling Distributions and the Central Limit Theorem;	2.5
	Thursday	Oct 10	2.6: Confidence Intervals for Means (Sigma Known)	2.6
8	Tuesday	Oct 15	2.7: Confidence Intervals for Means (Sigma Unknown)	2.7
	Thursday	Oct 17	2.8: Confidence Intervals for Population Proportions	2.8
9	Tuesday	Oct 22	Exam 2	Unit 2
	Thursday	Oct 24	3.1: Intro to Hypothesis Testing	3.1
10	Tuesday	Oct 29	3.2: Hypothesis Testing for the Mean (Sigma Known)	3.2
	Thursday	Oct 31	3.3: Hypothesis Testing for the Mean (Sigma Unknown)	3.3
11	Tuesday	Nov 5	3.4: Hypothesis Testing for Proportions	3.4
	Thursday	Nov 7	3.5: Testing the Difference Between Means (Sigma Known)	3.5
12	Tuesday	Nov 12	3.6: Testing the Difference Between Means (Sigma Unknown)	3.6
	Thursday	Nov 14	3.7: Correlations	3.7
13	Tuesday	Nov 19	3.8: Linear Regression	3.8
	Thursday	Nov 21	3.9: Measures of Regression and Predicted Intervals	3.9
14	Tuesday	Nov 26	Exam 3	
	Thursday	Nov 28	<i>Thanksgiving Break – No Classes</i>	
15	Tuesday	Dec 3	Review	
	Thursday	Dec 5	Review	
	Tuesday	Dec. 10	Final Exam 5pm – 7pm	Comprehensive

Last day to drop – Nov. 30th