South Plains College
Mathematics, Engineering, and Computer Science
MATH 1342 - Statistical Methods
Course Syllabus - Fall 2026

MATH 1342-003	**MATH 1342-004 (and 090)**
Schedule: Monday and Wednesday, 1:00 – 2:15 PM	**Schedule:** Tuesday and Thursday, 9:30 – 10:45 AM
Room: Levelland, Mathematics 112	**Room:** Levelland, Agriculture 105

Instructor: Amy Thee | M104 | athee@southplainscollege.edu | (806) 716-2528

Office Hours:

- M/W 10:35 - 11:35 AM in Levelland (M104 or location written on the whiteboard on the door)
- T/Th 10:45 - 11:45 AM in Levelland (M104 or location written on the whiteboard on the door)
- F: 10:00 AM - 2:00 PM at Downtown Lubbock Center (room TBA)

Booking Office Hours: Any student is more than welcome to visit during office hours; however, for the student's visit to be more efficient, ***please make an appointment in advance using Microsoft Bookings***. Students from other classes are often visiting during office hours and other college responsibilities may prevent office hours without notice. ***The Bookings link to book an appointment for office hours is posted on Blackboard.*** The default appointment duration is 10 minutes, but you may stay as long as you need. You will select your class when you book the appointment. Please bring specific questions to office hours; do not expect a full lecture on missed material.

Email Policy: 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. ***The instructor will only acknowledge and respond to emails using professional or academic etiquette and courtesy. Emails received after 5 PM or during weekends will likely not be answered until the following business day.***

Supplies: Written notes are an expectation. A spiral notebook and a folder to keep handouts ***or*** a 3-inch ring binder with loose-leaf notebook paper is recommended. You may use a tablet to write (not type) your notes. (TI-83 OR TI-84 CALCULATOR ALLOWED, NO TI-NSPIRES OR SYMBOLIC CALCULATORS)

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

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: There will be four exams and departmental final exam questions given by all instructors. These exams will be written on paper and administered during class time. Some questions may require short-answer responses; these answers are not graded based on grammar, rather, that they illustrate a general understanding of the concepts.

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 cannot receive an X, the instructor will assign an F.

Academic Integrity and Expectations for Submitted Work: To ensure every student leaves the course with a working knowledge of precalculus, homework and exams will be written on paper. ***With small class sizes and instructor involvement during in-class practice, AI-generated and/or blindly copied solutions from any source are evident and will not be accepted, and the student will not receive credit for the assignment.*** The instructor's goal is to understand where each student is in the learning process and offer the support necessary for the student to succeed without feeling the need to copy. ***The instructor reserves the right to verify the integrity of a student's submitted work by verbally assessing the student's knowledge; if the student is unable to explain their problem-solving process in the submitted work, the student will not receive credit for the assignment.***

Laptops, phones, headphones/earbuds, smart watches/glasses, or any electronic device that can provide solutions will be put away or placed at the front of the room for all exams.

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.

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/.

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.

Notes and Homework: It is expected that you write down all the lecture notes and reference them when you need help. Achieving success in this class will require giving regular effort outside of class by completing homework. If you plan to be successful in this class, expect to spend a **minimum** of 8 to 12 hours outside class every week maintaining or increasing your math skills. Homework is planned practice for students to master the skills taught in class and needed in higher-level mathematics courses. Every student must do homework. Homework will be assigned daily. ***Due dates are posted on the course calendar.*** The assigned homework will be available on Blackboard.

Homework/practice is graded using the following rubric.

100%	Completed assignment; all work shown; selected exercises found accurate
95%	Completed assignment; all work shown; missing accuracy on selected exercise
85%	Completed assignment; all work shown; missing accuracy on a few selected exercises
75%	Completed assignment; all work shown; missing accuracy on several selected exercises
25-50%	Assignment incomplete; some work shown; missing accuracy on most selected exercises
0%	Assignment missing **OR** no work shown

Grading Scale:

90 or above	A
80 to 89	B
70 to 79	C
60 to 69	D
59 and Below	F

Assignment Weights:

Homework/Practice	20%
Exam 1	15%
Exam 2	15%
Exam 3	15%
Exam 4	15%
Final Exam	20%

All supplemental material and your current grade are available all semester on Blackboard. Upon the submission of grades at the end of the semester, all grades are final.

Feedback: The instructor reserves the right to have one (1) week to grade assignments and post grades from the due date.

Late Assignments: Due dates for homework assignments are posted on the course calendar. ***For homework assignments, a student has one (1) day after the due date to turn in the assignment, with a 25-point penalty.***

Absences During Exams: A student who is absent during an exam will only be allowed to make up the exam if they ***provide a note from a doctor or written documentation of an acceptable extenuating circumstance, such as a family emergency or transportation issue, at the discretion of the instructor***.

In such case, the student must schedule the make-up exam with the instructor outside of class time, no later than one (1) week after the original exam date. Do not expect this accommodation for more than one exam.

Holiday/Travel Statement: If a student has pre-existing plans to travel out of the area during a scheduled exam or homework deadline, you must inform the instructor no later than one (1) week before the absence. Failure to do so will result in the forfeiture of any assignments that will come into question during your dates of absence. These assignments will not be replaced or allowed for make-up work.

Diversity Statement: In this class, the instructor 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 model society as it should and can be.

Disabilities 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 at 806-716-2577 or 806-716-4675.

Resources:

- Free tutoring at Levelland is available in Room 116 of the Mathematics-Engineering Building and at the Lubbock Center in Lubbock (3907 Avenue Q). Please remember to sign in when you seek the help of a tutor in each of these places.
- Videos may be viewed on YouTube. These videos do not replace class meetings, but they can be used as supplemental material or to view missed content after an absence. There are videos embedded within each module on Blackboard. Watch and take notes on these videos before seeking help.

MATH 1342-003 (MW) Tentative Class Schedule

*Homework is assigned at each class meeting and is due at the **beginning** of the first class day of the following week.*

Date	Topic	Assignments	Due Date
Outline for Exam 1 – Manipulating and Analyzing Data			
Monday, August 24	Introduction/Descriptive and Inferential Statistics	Read syllabus, 1.1	8/31
Wednesday, August 26	Variables and Data, Experimental Design	1.2, 1.4	8/31
Monday, August 31	Organizing and Presenting Data	2.1, 2.2	9/9
Wednesday, September 2	Presenting Data (cont.), Distribution Shapes	2.2, 2.4	9/9
Monday, September 7	***Labor Day (No class)***		
Wednesday, September 9	Measuring the "Center" of a Dataset	3.1	9/14
Monday, September 14	Measuring the "Spread" of a Dataset	3.2	9/21
Wednesday, September 16	Percentiles, Box plots, Outliers	3.4	9/21
Monday, September 21	**Exam 1 (12 points)**		
Outline for Exam 2 – Modeling Uncertainty and Chance			
Wednesday, September 23	Correlation of Variables, Linear Regression	10.1, 10.2	9/28
Monday, September 28	Basic Probability Theory, Rules of Probability	4.1, 4.2	10/5
Wednesday, September 30	Rules of Probability (cont.), Independence	4.3	10/5
Monday, October 5	Random Variables, Probability Distributions	5.1, 5.2	10/12
Wednesday, October 7	Mean, Variance, and Standard Deviation	5.2	10/12
Monday, October 12	Binomial Random Variables	5.3	10/19
Wednesday, October 14	Review/Practice for Unit 2		10/19
Monday, October 19	**Exam 2 (12 points)**		
Outline for Exam 3 – Normality and Confidence			
Wednesday, October 21	Normally-Distributed Variables, z-scores	6.1	10/26
Monday, October 26	Applications of the Normal Distribution	6.2	11/2
Wednesday, October 28	The Central Limit Theorem	6.3	11/2
Monday, November 2	Normal Distributions Lab	6.1 – 6.3	
Wednesday, November 4	Confidence Intervals (known σ), t-distribution	7.1	11/9
Monday, November 9	Confidence Intervals (cont., unknown σ)	7.2, 7.3	11/16
Wednesday, November 11	Finish Confidence Intervals, Review	7.3	11/16
Monday, November 16	**Exam 3 (12 points)**		
Outline for Exam 4 – Hypothesis Testing			
Wednesday, November 18	Ch. 8 Overview, Hypothesis Testing for a Mean μ	8.1, 8.2	11/23
Monday, November 23	Hypothesis Testing for μ (cont.)	8.3	11/30
Wednesday, November 25	***Thanksgiving (No class)***		
Monday, November 30	Testing for a Proportion p, Review	8.4	TBA
Wednesday, December 2	**Exam 4 (12 points)**		
Comprehensive Final Exam			
December 7 – 10	**Final Exam (TBA)**		

MATH 1342-004, 090 (TR) Tentative Class Schedule

*Homework is assigned at each class meeting and is due at the **beginning** of the first class day of the following week.*

Date	Topic	Assignments	Due Date
Outline for Exam 1 – Manipulating and Analyzing Data			
Tuesday, August 25	Introduction/Descriptive and Inferential Statistics	Read syllabus, 1.1	9/1
Thursday, August 27	Variables and Data, Experimental Design	1.2, 1.4	9/1
Tuesday, September 1	Organizing and Presenting Data	2.1, 2.2	9/8
Thursday, September 3	Presenting Data (cont.), Distribution Shapes	2.2, 2.4	9/8
Tuesday, September 8	Measuring the "Center" of a Dataset	3.1	9/15
Thursday, September 10	Work on Homework/Practice		
Tuesday, September 15	Measuring the "Spread" of a Dataset	3.2	9/22
Thursday, September 17	Percentiles, Box plots, Outliers	3.4	9/22
Tuesday, September 22	**Exam 1 (12 points)**		
Outline for Exam 2 – Modeling Uncertainty and Chance			
Thursday, September 24	Correlation of Variables, Linear Regression	10.1, 10.2	9/29
Tuesday, September 29	Basic Probability Theory, Rules of Probability	4.1, 4.2	10/6
Thursday, October 1	Rules of Probability (cont.), Independence	4.3	10/6
Tuesday, October 6	Random Variables, Probability Distributions	5.1, 5.2	10/13
Thursday, October 8	Mean, Variance, and Standard Deviation	5.2	10/13
Tuesday, October 13	Binomial Random Variables	5.3	10/20
Thursday, October 15	Review/Practice for Unit 2		
Tuesday, October 20	**Exam 2 (12 points)**		
Outline for Exam 3 – Normality and Confidence			
Thursday, October 22	Normally-Distributed Variables, z-scores	6.1	10/27
Tuesday, October 27	Applications of the Normal Distribution	6.2	11/3
Thursday, October 29	The Central Limit Theorem	6.3	11/3
Tuesday, November 3	Normal Distributions Lab	6.1 – 6.3	
Thursday, November 5	Confidence Intervals (known σ), t-distribution	7.1	11/10
Tuesday, November 10	Confidence Intervals (cont., unknown σ)	7.2, 7.3	11/17
Thursday, November 12	Finish Confidence Intervals, Review	7.3	11/17
Tuesday, November 17	**Exam 3 (12 points)**		
Outline for Exam 4 – Hypothesis Testing			
Thursday, November 19	Ch. 8 Overview, Hypothesis Testing for a Mean μ	8.1, 8.2	11/24
Tuesday, November 24	Hypothesis Testing for μ (cont.)	8.3	12/1
Thursday, November 26	***Thanksgiving (No class)***		
Tuesday, December 1	Testing for a Proportion p, Review	8.4	TBD
Thursday, December 3	**Exam 4 (12 points)**		
Comprehensive Final Exam			
December 7 – 10	**Final Exam (TBA)**		

Expectations of the Instructor

The student is within all rights to expect that the instructor does the following:

- Show up, as scheduled, to teach all information pertaining to the course.
- Provide notice of any schedule changes.
- Maximize the time allotted for this course by assessing student aptitude of covered information at the close of each lecture, when time permits.
- Present the material in a manner that can generally be understood by the majority of the class.
- Be accessible to those who need assistance outside of the classroom setting, by e-mail or in person during office hours or reasonably scheduled appointment times.
- Hold to any assignment(s) given during the semester unless removed.
- Uphold the policies of the college as it pertains to the students' welfare in the course.
- Make no exceptions regarding the dismissal of any student from the course for reasons listed herein.
- Allow each student the opportunity to discuss the material presented during the lecture period.
- Provide examinations based on the information discussed in class that contain problems which use solving methods ***similar*** to those assigned from sections pertaining to the exam.
- Provide graded feedback for assignment within one week of submission.
- Silence and put away personal electronic devices.

Expectations of the Student

The instructor is within all rights to expect that the student does the following:

- Show up on time, as scheduled, to receive and learn all information pertinent to the course and be mindful of any schedule changes.
- If you are going to withdraw from this course, then all withdrawals must be made by the deadline stated by South Plains College. There will be no withdrawals given after this date.
- READ THE SYLLABUS! You will remain subject to the criteria outlined herein whether you read this or not, so it is in your best interest to do so!
- Take advantage of all resources available to you. In the collegiate setting, all students are considered adults and are expected to uphold conduct worthy of such consideration.
- Be mindful of the classroom setting and the roles therein. While student tuition is vital to the well-being of this academic institution, this does NOT warrant the concession of any instructor to you in a manner that compromises the integrity of the classroom setting and that of the institution itself.
- Bring all materials needed for the course and refrain from bringing anything that is not needed.
- Be willing to work together with – BUT NOT DO WORK FOR – fellow classmates.
- Keep all homework assignments organized in a binder or folder. This will prove to be helpful in preparing for the exams.
- Write all graded work legibly.
- Work homework early enough to get help, if needed.
- Silence all electronic devices off that have no use in the classroom setting.
- Obtain all missed information and assignments from a fellow classmate or in Blackboard.
- Turn in all your work on time.